REPORT RESUMES

ED 019 039 JC 670 353

THE REGENTS STATEWIDE PLAN FOR THE EXPANSION AND DEVELOPMENT OF HIGHER EDUCATION, 1964, WITH THE PROGRESS REPORTS FOR 1966 AND 1967. (TITLE SUPPLIED).

STATE UNIV. OF N.Y., ALBANY

NEW YORK STATE EDUCATION DEPT., ALBANY

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DESCRIPTORS- *JUNIOR COLLEGES, *STATE PROGRAMS, *MASTER PLANS, *HIGHER EDUCATION, GOVERNANCE, EDUCATIONAL FINANCE, ADMINISTRATIVE ORGANIZATION, EDUCATIONAL POLICY, EDUCATIONAL PHILOSOPHY, EDUCATIONAL RESOURCES, NEW YORK,

AS THE HEAD OF THE STATE'S EDUCATIONAL SYSTEM, THE BOARD OF REGENTS EXERCISES CONTROL OVER FOUR SEGMENTS OF HIGHER EDUCATION--(1) THE STATE UNIVERSITY OF NEW YORK, (2) THE CITY UNIVERSITY OF NEW YORK, (3) THE COMMUNITY COLLEGES OPERATING WITHIN THE PROGRAM OF THE STATE UNIVERSITY, AND (4) THE PRIVATELY CONTROLLED COLLEGES. IN 1964 THE REGENTS PREPARED THIS PLANNING DOCUMENT, GIVING ATTENTION TO (1) THE STATE'S HIGHER EDUCATION NEEDS, INCLUDING PROJECTIONS OF ENROLLMENTS, (2) THE REGENTS' GOALS FOR POST-HIGH SCHOOL EDUCATION, (3) REVIEWS OF INSTITUTIONAL PLANS, (4) A 63-POINT PLAN FOR ORGANIZATION AND ADMINISTRATION OF HIGHER EDUCATION, (5) FINANCING, AND (6) RECOMMENDATIONS FOR FUTURE DEVELOPMENT. THE PLAN IS INTENDED (1) TO MEET THE NEEDS OF INDIVIDUALS, (2) TO MEET THE NEEDS OF THE ECONOMY AND THE SOCIETY, (3) TO STRENGTHEN INSTITUTIONS, (4) TO IMPROVE STATE SERVICES TO THE COLLEGES, AND (5) TO GUIDE AND ENCOURAGE THE DEVELOPMENT OF NEW PROGRAMS AND INSTITUTIONS. APPENDIXES CONTAIN EXCERPTS FROM PERTINENT STATE LAWS, A LIST OF RELATED STUDIES AND REPORTS, AND LISTS OF THE STATE'S INSTITUTIONS OF HIGHER EDUCATION, WITH SELECTED STATISTICAL INFORMATION. SUPPLEMENTAL PROGRESS REPORTS SUBMITTED BY THE BOARD OF REGENTS IN 1966 AND 1967 ARE INCLUDED IN THE BASIC DOCUMENT. (WO)

ED019039

The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK / APRIL, 1965

JC 670 333

The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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1784

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK / APRIL, 1965

The University of the State of New York

REGENTS OF THE UNIVERSITY

(with years when terms expire)

Edgar W. Couper, A.B., LL.D., L.H.D., *Chancellor*	Binghamton,	1968
Thad L. Collum, C.E., *Vice-Chancellor*	Syracuse,	1967
Alexander J. Allan, Jr., LL.D., Litt.D.	Troy,	1978
Charles W. Millard, Jr., A.B., LL.D.	Buffalo,	1973
Everett J. Penny, B.C.S., D.C.S.	White Plains,	1970
Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S.	Purchase,	1972
Edward M. M. Warburg, B.S., L.H.D.	New York,	1975
J. Carlton Corwith, B.S.	Water Mill,	1971
Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D.	New York,	1969
Joseph T. King, A.B., LL.B.	Queens,	1977
Joseph C. Indelicato, M.D.	Brooklyn,	1974
Mrs. Helen B. Power, A.B., Litt.D.	Rochester,	1976
Francis W. McGinley, B.S., LL.B.	Glens Falls,	1979
John I. Snyder, Jr., B.S.	Shelter Island,	1966

PRESIDENT OF THE UNIVERSITY AND COMMISSIONER OF EDUCATION
James E. Allen, Jr.

DEPUTY COMMISSIONER OF EDUCATION
Ewald B. Nyquist

ASSOCIATE COMMISSIONER FOR HIGHER AND PROFESSIONAL EDUCATION
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ASSISTANT COMMISSIONER FOR HIGHER EDUCATION PLANNING
S. V. Martorana

ASSOCIATE COORDINATOR OF HIGHER EDUCATION PLANNING
Elvis L. Eckles

K1049—My65-15,000

April, 1965

To the Governor and the Legislature of the State of New York:

In accord with Section 237, subdivision 3, of the Education Law of New York State, I am pleased to submit herewith the *Regents Statewide Plan for the Expansion and Development of Higher Education, 1964.*

This Plan incorporates the approved proposals presented in *The Master Plan, Revised 1964,* of State University of New York and *The Master Plan for the City University of New York, 1964* as required by the Education Law. After its initial formulation and release as the *Regents Tentative Plan,* a public hearing on its contents and recommendations was held in Albany at the State Education Department on March 24. The complete transcript of the presentations made at the hearing are on file in the Department. On the basis of the comments made and information provided, several changes were made in the tentative plan before the final version was printed.

This 1964 Plan represents the first of a continuing series of statewide plans to be published every four years with intervening annual reports of progress on the recommended actions advanced. The 1964 Plan, therefore, is viewed by the Regents as a landmark in the progress of higher education in our State. It includes 37 approved proposals or endorsed goals from State University's 1964 Plan and 53 from City University's. In addition, it encompasses many proposals relevant to the State's privately controlled colleges and universities. Beyond these the Regents advance a total of 63 proposals for the long-range and broad strengthening of higher education in New York.

I commend this Plan and its recommendations to you for serious consideration and prompt implementation on a strong bipartisan basis. Both major political parties in New York State have consistently supported excellent education. The productive lives of many of our citizens and the general welfare and strength of the State require a continuation of this joint effort.

Respectfully yours,

E. W. Couper

Chancellor
Regents of The University
of the State of New York

Foreword

With the increasing complexity of our society there is an ever-growing dependence upon the colleges and universities both to solve many of the problems of our day and to forestall the development of even greater problems of the future. It is imperative, therefore, that all available resources in higher education be marshalled and organized to meet the growing need for advanced learning, research, and productive application of knowledge.

The immediate and long-range problems in higher education are serious and pressing. Enrollments are skyrocketing. Costs of operating classrooms, laboratories, and dormitories are rising steadily. Faculty with essential qualifications are in short supply. Building costs are formidable.

Problems of such magnitude will require the most careful planning for maximum effectiveness in the use of our available resources. Coordination and cooperation are essential. New York State is fortunate in having a legal and operational framework admirably suited to the development of a united attack upon the needs and problems in higher education. Recognizing the advantages for state-level coordination and long-range planning inherent in New York State's unique structure, the Governor and Legislature in 1961 set in motion a formal process for continuing planning and development.

Under this process, the State Board of Regents, as the head of the State's total educational enterprise, is required to prepare every fourth year a comprehensive plan for the orderly development of higher education. To have a structure which makes such a process possible is of incalculable advantage to the State. The preservation of this structure and the strengthening of the planning process are most decidedly in the best interest not only of education but of the general advancement of the State's welfare.

This first quadrennial Regents Plan is a milestone of progress in New York State education. It is a comprehensive plan, representing the efforts of many people, coordinating information and proposals from all segments of education, and drawing upon records and reports from many private and public groups and agencies. No previous efforts in planning for higher education in the State have been as extensive or intensive as those involved in preparing the Regents Statewide Plan, but even so, this plan is not, of course, final or complete. It is the first of a continuing process and will receive annual review and modification.

With the rapid growth and change which characterize this period in higher education, it is impossible to anticipate fully or to deal adequately with every developing situation. There are certain particular needs which modifications of this report and further reports will have to consider more thoroughly.

Chief among the immediate concerns which the people of the State are alerted to act upon is the "gap" between the number of persons actually entering college and the much greater number who have the ability to succeed in college study. This "gap" represents an intolerable waste of valuable human talent. While the 1964 Regents Plan does advance a series of actions that will start now to cut down on this waste and steadily reduce it in the future, there is a need to concentrate greater attention on identifying and motivating the large number of able and talented young men and women who do not now even consider college attendance.

The preparation of this report has revealed also a need for better statistical information with which to analyze manpower requirements in the State. Comprehensive and accurate information is essential if the proper educational programs and opportunities are to be available. The State must give greater attention and support to efforts to collect and analyze information on the supply and demand for manpower.

The increasing urbanization of our society is perhaps the most notable characteristic of our times. The meaning of this has not yet been fully reflected in the planning for higher education. To be sure, the Regents Plan does support State University on such goals as the formulation of programs for talented but disadvantaged persons, and endorses City University's plan to establish a special program of urban studies and research. But much more attention needs to be given by the modern university to the problems and opportunities caused by crime and delinquency, racial segregation, inadequate and deteriorated housing, cultural deprivation, and other conditions closely associated with large cities. Our colleges and universities are urged to relate more of their programs and resources to the dynamics of the metropolitan center.

The problems confronting higher education are many and difficult. This Plan does not present solutions for all of them, but it does represent a strong, decisive step forward and will serve as a sound base on which to build.

While this is a time of pressures and difficulties in education, it is also a time of great opportunity. With approval of this Plan the opportunity for progress will not be lost and higher education in New York State can move forward with renewed confidence and vigor.

JAMES E. ALLEN, JR.
Commissioner of Education

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Introduction

Planning for higher education by the State of New York has had a long history. The first of a series of reports and legislative acts concerned with colleges and universities goes back to 1784, five years before the founding of the Republic. In that year the Legislature created a corporation entitled "The Regents of the University of the State of New York" which was empowered to found schools and colleges. In 1961 the Legislature amended the Education Law of the State by directing the Regents to prepare a plan for the expansion and development of higher education.[1]

This legislative act is unique among state statutes on planning for higher education in that it calls for continuous planning involving all institutions of higher education in the State whether under private or public control. The law requires that the Regents Plan be brought up to date every four years, and provision is made for annual reports and amendments in the intervening years. In all these Regents plans, recognition is to be given to "that historical development of higher education in the State which has been accomplished through the establishment and encouragement of private institutions."

This Regents Plan of 1964 is, therefore, but the first of a projected series of reports which will provide a continuity of State effort in planning. As such it is appropriate that it contain not only recommendations to meet present needs and those most clearly defined for the years immediately ahead, but also that it consider broad policies and proposals which will be of increasing importance in long-range planning.

Part I describes briefly the complex of higher education, including over 200 publicly and privately controlled colleges and universities, all of which are to be considered in statewide long-range planning. The number and variety of colleges and universities, both private and public, are unequaled by any other state in the nation and present extraordinarily rich resources for postsecondary education. But this number and variety of institutions obviously make planning difficult, complicated, and critically important.

To provide a proper orientation for planning, Part II briefly describes the needs for higher education, both from the point of view of the individual and of the State.

Part III presents the goals that must guide State planning if these needs are to be met.

Part IV reviews the long-range plans of State University and City University and specifies reservations held by the Regents. Brief reference is also made here to the plans of privately controlled institutions as the background for the more complete consideration that appears in Part V.

The responsibility of the Regents, however, extends beyond the review and approval of proposals advanced by the colleges and universities of the State. The legislation of 1961 requires the Regents not only to review the long-range plans of State University and of City University, but upon approval, to incorporate them in a Regents Plan for the expansion and development of higher education in the State. A simple compilation of their proposals, along with the addition of available information on the plans of private institutions, would not produce a comprehensive, long-range, statewide Regents Plan envisioned by the legislation of 1961. This was further emphasized by the provision in the statute that the Regents "may include plans with respect to other matters not comprehended within the Plan of the State and City University." Therefore, in Part V proposals originating with the Regents are advanced to supplement those received from the institutions and to deal with certain broad problems and areas of special concern which become apparent in planning to meet the needs of the State as a whole.

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[1] The pertinent sections of the 1961 amendment to the Education Law appear in Appendix A, and a selected list of the more important documents concerning planning will be found in Appendix B to this report.

Part VI discusses factors affecting costs, and trends in expenditures and income. It concludes with an estimate of the total cost expected by 1970.

Finally, a summary and perspective of the total Plan is presented in Part VII.

Part 1

INSTITUTIONS, ORGANIZATIONS, RELATIONSHIPS

The Committee on Higher Education, appointed jointly by the Governor and the Regents, in its 1960 study described the State's machinery for the control and operation of higher education as "one of the most complex in the whole country." [2] Yet underlying this complex and often confusing legal administrative structure are certain fundamentally sound principles and patterns of organization. Although these are not always clearly perceived, they are nevertheless a source of great strength in New York State as it moves to meet today's vast needs and tremendous problems in higher education.

1. THE REGENTS OF THE UNIVERSITY OF THE STATE OF NEW YORK

The history of the legal structure for governing higher education in New York State goes back to 1784. In that year "The Regents of the University of the State of New York" was incorporated and empowered to found schools and colleges. The Regents have constitutional as well as statutory authority over educational matters in the State.

Today the higher education component of The University of the State of New York (not to be confused with State University of New York described in the next section) consists of 231 main campuses and institutional branches of colleges and universities in New York State (Figure 1) which have been incorporated by the State Board of Regents or are subject to visitation by the Regents. (See Appendix C for a list of these institutions and Appendix D for their regional distribution.) Under the law this unique University includes, in addition to institutions of higher education, all secondary schools and such other institutions as schools, museums, libraries, organizations, and agencies for education "now or hereafter incorporated by the State." Thus, The University of the State of New York comprises the entire educational system in New York State, from nursery school to graduate school, public and private.

The University of the State of New York is governed and all of its corporate powers are exercised by the State Board of Regents, a body of fourteen laymen, elected by the Legislature, each for a fourteen-year term. The Regents' appointed executive officer, and the professional head of the University, is the State Commissioner of Education, who also holds the title of President of The University of the State of New York. The State Education Department is the executive agency for the Regents and the Commissioner.

The Regents are vested with the responsibility of determining the "educational policies" of the State, consistent with the Constitution and statutes, and are authorized to establish rules carrying into effect the laws and policies of the State relating to education. They are directed by law "to encourage and promote education, to

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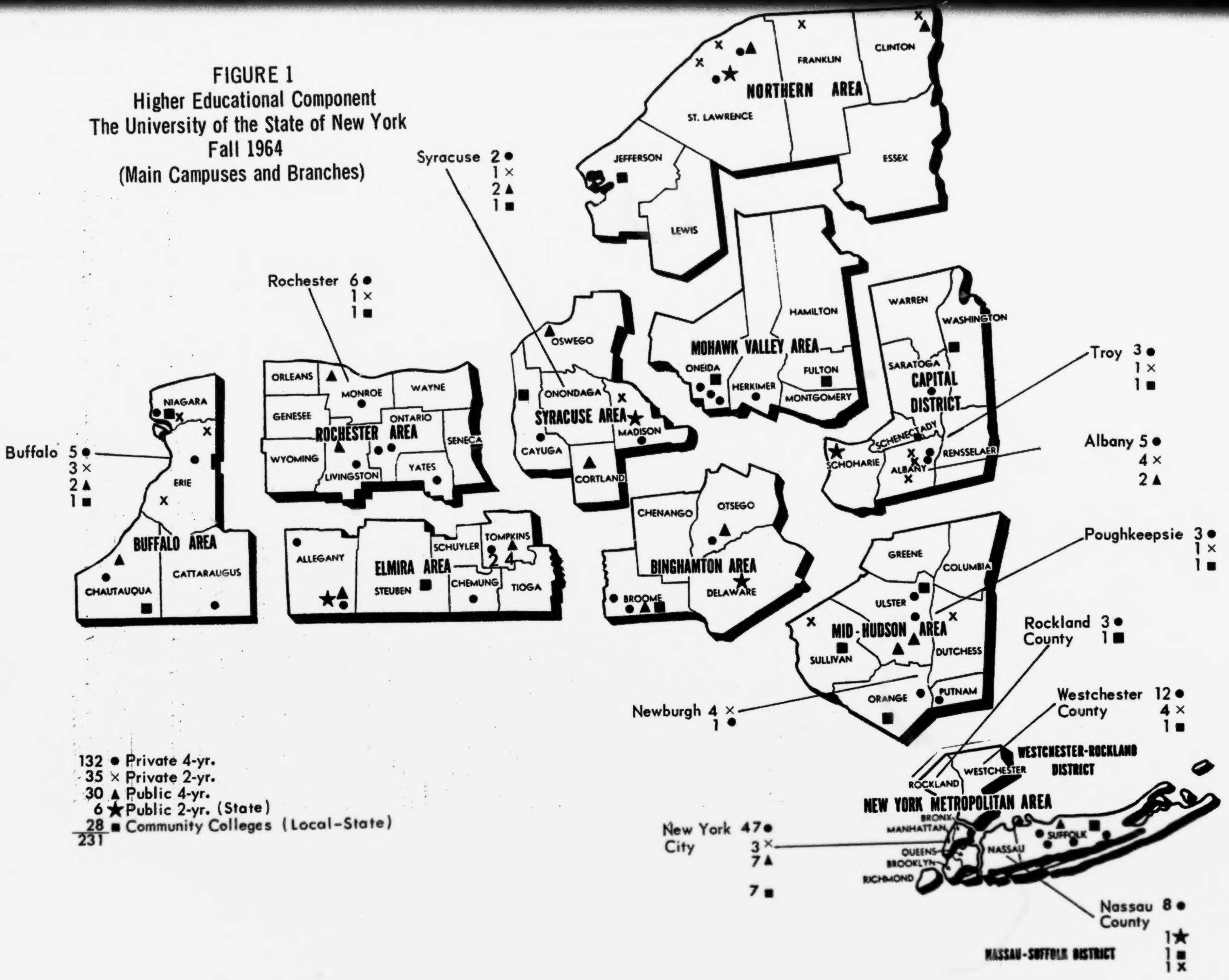
[2] **Meeting the Increasing Demand for Higher Education in New York State,** A Report to the Governor and the Board of Regents. Committee on Higher Education (Marion B. Folsom, John W. Gardner, Henry T. Heald, Chairman) and Director of Studies Sidney G. Tickton. November 1960.

FIGURE 1
Higher Educational Component
The University of the State of New York
Fall 1964
(Main Campuses and Branches)


NORTHERN AREA
ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
JEFFERSON
LEWIS
MOHAWK VALLEY AREA
HAMILTON
ONEIDA
HERKIMER
FULTON
MONTGOMERY
CAPITAL DISTRICT
WARREN
WASHINGTON
SARATOGA
SCHENECTADY
SCHOHARIE
ALBANY
RENSSELAER
SYRACUSE AREA
OSWEGO
ONONDAGA
MADISON
CAYUGA
CORTLAND
ROCHESTER AREA
ORLEANS
MONROE
WAYNE
GENESEE
ONTARIO
SENECA
WYOMING
LIVINGSTON
YATES
BUFFALO AREA
NIAGARA
ERIE
CHAUTAUQUA
CATTARAUGUS
ELMIRA AREA
ALLEGANY
STEUBEN
SCHUYLER
TOMPKINS
CHEMUNG
TIOGA
2
4
BINGHAMTON AREA
CHENANGO
OTSEGO
BROOME
DELAWARE
MID-HUDSON AREA
GREENE
COLUMBIA
ULSTER
SULLIVAN
DUTCHESS
ORANGE
PUTNAM
WESTCHESTER-ROCKLAND DISTRICT
ROCKLAND
WESTCHESTER
NEW YORK METROPOLITAN AREA
BRONX
MANHATTAN
QUEENS
BROOKLYN
RICHMOND
NASSAU
SUFFOLK
NASSAU-SUFFOLK DISTRICT
Syracuse 2 ● 1 × 2 ▲ 1 ■
Rochester 6 ● 1 × 1 ■
Buffalo 5 ● 3 × 2 ▲ 1 ■
Troy 3 ● 1 × 1 ■
Albany 5 ● 4 × 2 ▲
Poughkeepsie 3 ● 1 × 1 ■
Rockland County 3 ● 1 ■
Westchester County 12 ● 4 × 1 ■
Newburgh 4 × 1 ●
New York City 47 ● 3 × 7 ▲ 7 ■
Nassau County 8 ● 1 ★ 1 ■ 1 ×
132 ● Private 4-yr.
35 × Private 2-yr.
30 ▲ Public 4-yr.
6 ★ Public 2-yr. (State)
28 ■ Community Colleges (Local-State)
231

visit and inspect its several institutions and departments, to distribute to or expand or administer for them such property and funds as the State may appropriate therefor or as the University may own or hold in trust or otherwise, and to perform such other duties as may be entrusted to it."

The Regents and the Commissioner of Education are authorized to inspect and require reports from any institutions in the University. The Regents may suspend or revoke the charter of any of the rights and privileges of any institution which fails to make any required reports or violates any law or any rule of the Regents.

In addition to their broad coordinating and supervisory roles for all of education in the State, the Regents have certain specific responsibilities for higher education. The most recent is the promulgation and revision of this Regents Plan for the expansion and development of higher education in the State. Others are: chartering institutions; approving curriculums leading to all degrees at all levels; certifying teachers; examining, licensing, and enforcing laws regarding conduct of twenty professions; administering the undergraduate scholarship, graduate fellowship, and Scholar Incentive programs; and encouraging improvement and innovation in instruction and college administration. As the State Commission for the Higher Education Facilities Act of 1963 and for the Vocational Education Act of 1963, the Board of Regents also carries responsibilities for the administration of certain statewide Federal programs bringing Federal aid to higher education, both private and public.

THE STATE ADVISORY COUNCIL ON HIGHER EDUCATION

In addition to the work of the various offices of the State Education Department serving to integrate this huge federation of privately and publicly controlled colleges and universities, the Regents and the Commissioner are assisted by the State Advisory Council on Higher Education, composed of 18 chief executive officers from all types of publicly and privately controlled colleges and universities of the State. Established by the Regents in 1958 with the Commissioner of Education as its chairman, it has played an important role in formulation of educational policies. Matters concerned with proposed legislation, educational planning and administration, and statewide coordination and cooperation are brought before the Council for study and recommendation.

The four major segments [3] of higher education in The University of the State of New York over which the Regents preside are: State University of New York; City University of New York; the community colleges operating within the program of State University of New York; and the privately controlled colleges.

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[3] See Appendix E for details:

Table 15. Higher Educational Institutions in New York State by Type of Control and Length of Programs, 1963-64.

Table 16. Number and Highest Level of Offering of Higher Educational Institutions in Six States and in the United States, 1963-64.

Table 17. Full-Time Degree-Credit Enrollment by Degree Level and Type of Institution—Preliminary Survey—Fall 1964.

Table 18. Part-Time Degree-Credit Enrollment by Degree Level and Type of Institution—Preliminary Survey—Fall 1964.

Table 19. Full- and Part-Time Degree-Credit Enrollment by Degree Level and Type of Institution—Preliminary Survey—Fall 1964.

Table 20. Comparison of Degree-Credit Enrollments Fall 1963 and Fall 1964.

Table 21. Selected Comparative Data, Private and Public Institutions.

2. STATE UNIVERSITY OF NEW YORK

State University of New York is controlled by a Board of Trustees, appointed by the Governor and confirmed by the Senate. The fifteen members serve ten-year terms. State University encompasses four university centers, ten multiple-purpose four-year colleges, two medical centers, six two-year agricultural and technical colleges, eight other professional colleges, and 28 community colleges within the program of State University of New York. The headquarters for central administration and coordination of State University is located in Albany.

With the exception of the submission of a long-range plan and its periodic revision, the Board of Trustees of State University is related to the Regents in the same way as are the boards of control of all the private institutions of higher education.

3. CITY UNIVERSITY OF NEW YORK

The legislative act of 1961 created City University of New York, bringing together into a single university structure the several four-year colleges of the City of New York under the Board of Higher Education of the City of New York. The Board also serves as the trustees for six community colleges in New York City. This Board numbers 21 members who are appointed by the Mayor for terms of nine years, with the President of the Board of Education of the City of New York serving ex officio. Under the Education Law of the State the Board of Higher Education is a part of the public school system of New York City.

4. PUBLIC COMMUNITY COLLEGES

State University of New York has general responsibility, under the State Education Law, for the state-level supervision of the public community colleges. As of the fall of 1964, there were 28 such institutions in operation. Though generally supervised by State University, the community colleges in some respects are autonomous and independent of State University. Local governmental agencies sponsor these institutions and provide local tax funds to help support them. In most instances the sponsors are County Boards of Supervisors. Examples of exceptions to the general rule are the six community colleges sponsored by the Board of Higher Education of the City of New York. Within the program of State University, the educational operations and policies of the community colleges are, however, set by their own institutional boards of trustees. Each board of trustees has nine members, four appointed by the Governor and five by the local sponsoring agency.

5. PRIVATELY CONTROLLED HIGHER EDUCATION

Historically, New York State has relied heavily upon privately controlled colleges and universities. There are several reasons why this has been so. One is the fact that privately controlled colleges were established much earlier than any public institution. Some private colleges date back to the colonial period. Another is that New York's participation in the Federal Land-Grant Act of 1862 differed from the pattern typical of other states. As a result, "contract colleges" at Cornell University were established in agriculture, home economics, and industrial and labor relations. The wide diversity of backgrounds in nationality, religion, and family culture in New York State also encouraged the development of various types of privately controlled educational institutions.

Until a few years ago, the combined resources of the privately controlled colleges, the contract colleges at the three universities already named, the system of State-controlled and supported teachers' colleges, and the city colleges of New

York, were considered adequate to meet all of the State's needs. Not until 1948 was it decided that a full-scale State University was necessary to help meet the rapidly growing needs at the postsecondary school level.

That the State must continue to rely heavily on the private colleges is a fact of life constantly before the people of New York. The Heald Committee Report, after advocating several important and far-reaching moves to strengthen publicly controlled higher education, asserted:

> "But the bulwark of higher education in New York State for many years has been our private colleges and universities, and the great tradition of meeting the need of higher education through a combination of private and public institutions must be preserved for the future." [4]

The privately controlled colleges and universities in the State are remarkably diverse. Among the 167 private institutions and institutional branches in the State are some renowned, complex universities that equal in quality and reputation the best in the nation and the world. There are special-purpose schools, that, in their fields, enjoy comparable reputations. There are small junior colleges for women and others for men; minor and major seminaries; resident colleges that have students coming from all over the world; institutions that, though privately controlled, provide an essentially public service to the residents of a particular area.

When the private colleges are studied in their historic and present position in the State from a statewide perspective, it is clear that in their collective aspects they provide a strong resource to the State. Therefore, in this report the private colleges are handled as a group, except to distinguish between two-year and four-year types. A breakdown to this extent was necessary to provide, first, a basis for comparison of institutions under private and public control, and, second, a means of emphasizing the differences in objectives and scope of program between two-year and four-year institutions.

6. RELATED ORGANIZATIONS

Several other agencies should be mentioned in describing the setting for higher education in New York State. These relate to and assist the colleges and universities in various ways. Some of these agencies have a statutory basis and others are voluntary, independent associations.

The New York State Dormitory Authority, State University Construction Fund, and the Higher Education Assistance Corporation are legally authorized agencies. The Dormitory Authority, a separate public benefit corporation within The University of the State of New York, aids publicly controlled institutions to finance dormitories and related facilities and privately controlled colleges to finance all types of buildings. At the end of 1962-63 it had completed, or had in planning, arrangements for bond issues amounting to $240 million for public colleges and $67 million for private institutions. The State University Construction Fund, also a public benefit corporation, receives and administers monies available to State University of New York for construction of all types of buildings. In its December 31, 1963 annual report, the Fund indicated that projects had been completed totalling about $65 million in costs, another $155 million of projects were under construction, and projects in the design stage had an estimated value of about $346 million. The Higher Education Assistance Corporation has a different purpose; namely, to guarantee loans through local banks to students who are residents of New York State to assist them in meeting expenses of higher education. Up to

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[4] **Meeting the Increasing Demand for Higher Education in New York State.**

January 1, 1965 this nonprofit corporation had guaranteed 166,786 loans for $128,695,722.

Notable among many voluntary organizations related to higher education is the Association of Colleges and Universities of the State of New York and its Commission on Independent Colleges and Universities. Both public and private colleges and universities belong to this organization, which with a headquarters office and a full-time executive secretary promotes the cause of higher education in the State. Other groups are the Conference of Catholic Colleges and Universities of New York State, the New York State Junior College Association, the State Association of Trustees of Two-Year Colleges, and the Council of Higher Educational Institutions in New York City.

7. CONCLUSION

The New York State constitutional and statutory system for higher education has provided the framework within which a strong system of colleges and universities has developed and flourished. The system is sound in principle and uniquely suited to the great diversity of needs, resources, and interests which exist in the Empire State.

In this unique legal federation of all its colleges and universities the State of New York has the structure and the basic resources necessary for planning and developing a system of higher education equal to the tremendous educational task ahead, and at a level that few states can match. New York as a State has not yet made full and effective use of the potential inherent in this legal structure for cooperation, coordination, and orderly and rapid progress in higher education.

Part II

NEW YORK STATE'S NEEDS IN HIGHER EDUCATION

More people, higher aspirations, more demanding job requirements—these are forcing every state in the Union to increase greatly the resources devoted to higher education. To do this will require mobilization of present resources in higher education for more efficient use and the addition of new resources as necessary, if a state is to meet the needs of the individual and also of the economy and the society. New York State must not only provide enough places for students; it must also develop the high quality and variety of educational programs required to prepare citizens adequately for this revolutionary century and beyond. Excellence is necessary in every category of education from technician training to postdoctoral research and from regular programs to single refresher courses. In addition to providing instruction, our colleges and universities must also increase research and community services to discharge their full responsibility to the people.

1. NEEDS OF THE INDIVIDUAL

Reduced to simplest terms, the needs of New York State for more higher educational opportunities are best expressed by estimating the number of persons who must be served, for their good and for the good of the State. Such an estimate must take into consideration two basic questions: (1) How many persons in New York State will there be in the foreseeable future who can successfully complete an education beyond the high school and by doing so be more productive and effective citizens? (2) How does this total reservoir of human talent compare in size with the actual enrollment of students likely to develop in New York State colleges and universities in the same period of time? As long as there is a difference in the size of the total reservoir of college-able persons and the actual enrollment, whatever the reasons may be to explain it, the Regents feel that the State's achievement in higher education is not at the level it should be.

To differentiate between these two groups, this Regents Plan terms the total reservoir of human talent capable of success in college study as "college-going potential" and designates the enrollment that is predicted as likely to develop in higher educational institutions in the State as "probable college enrollment." Attention now turns to the answers to the two basic questions just stated and to the interrelated implications of the answers to these questions.

The rising numbers of college-age youth and of high school graduates expected in New York State are shown in Figures 2 and 3. The increases of about 50 per cent from 1959-60 to 1969-70 and of about 80 per cent from 1959-60 to 1979-80 are impressive in themselves. Yet they do not tell the whole story. The magnitude of the task and of the opportunity ahead is not reflected fully in these larger numbers but rather in the higher aspirations of students and their families throughout the State and the nation.

College attendance and a college degree are as necessary today as high school attendance and a high school diploma were in the past. The economic, social, and cultural forces in our society are all pushing in this direction. People are looking to

FIGURE 2
Number of College Age Youth (18-21)
New York State, 1959 - 1979
(State Education Department Estimates, 1963)

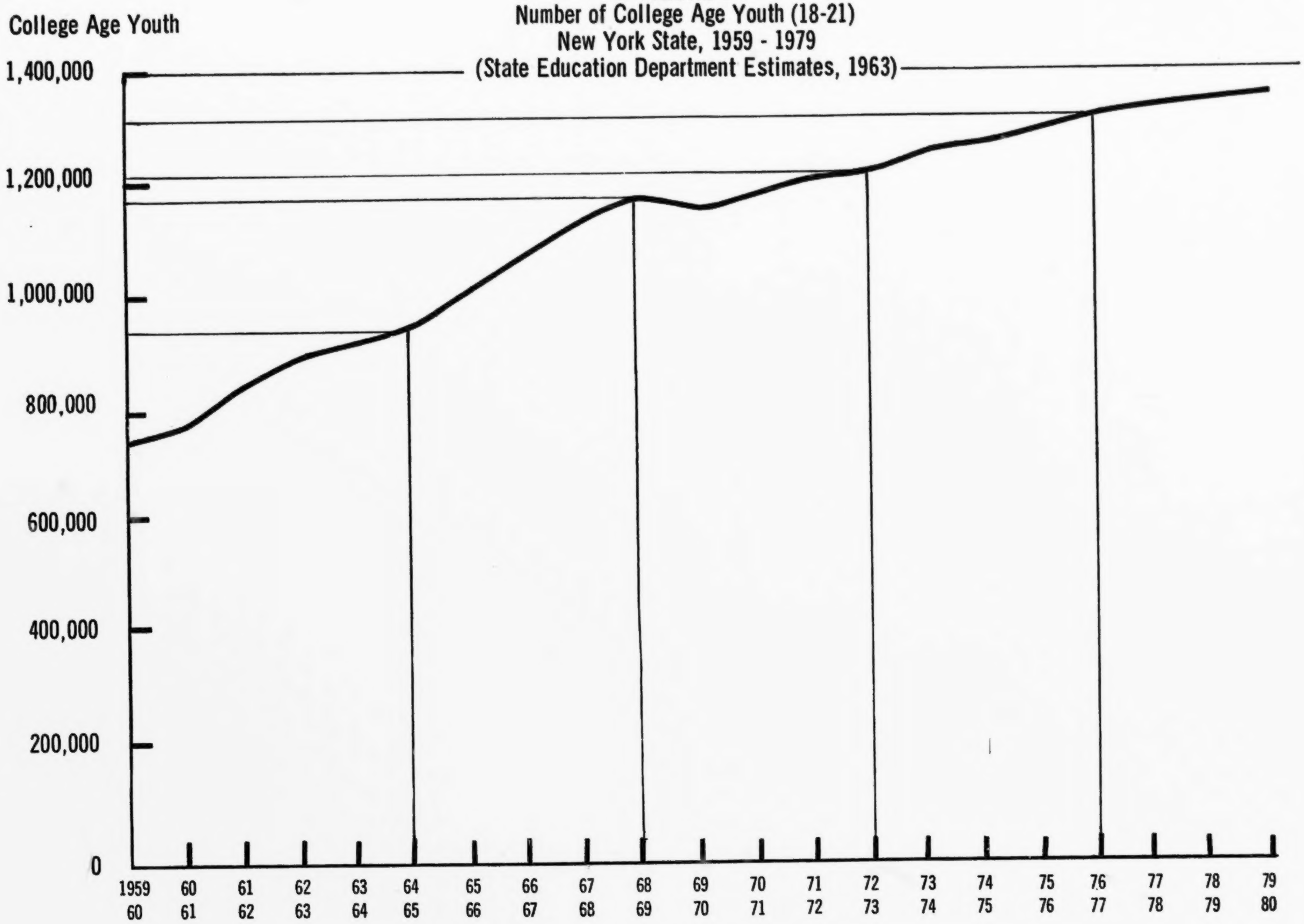
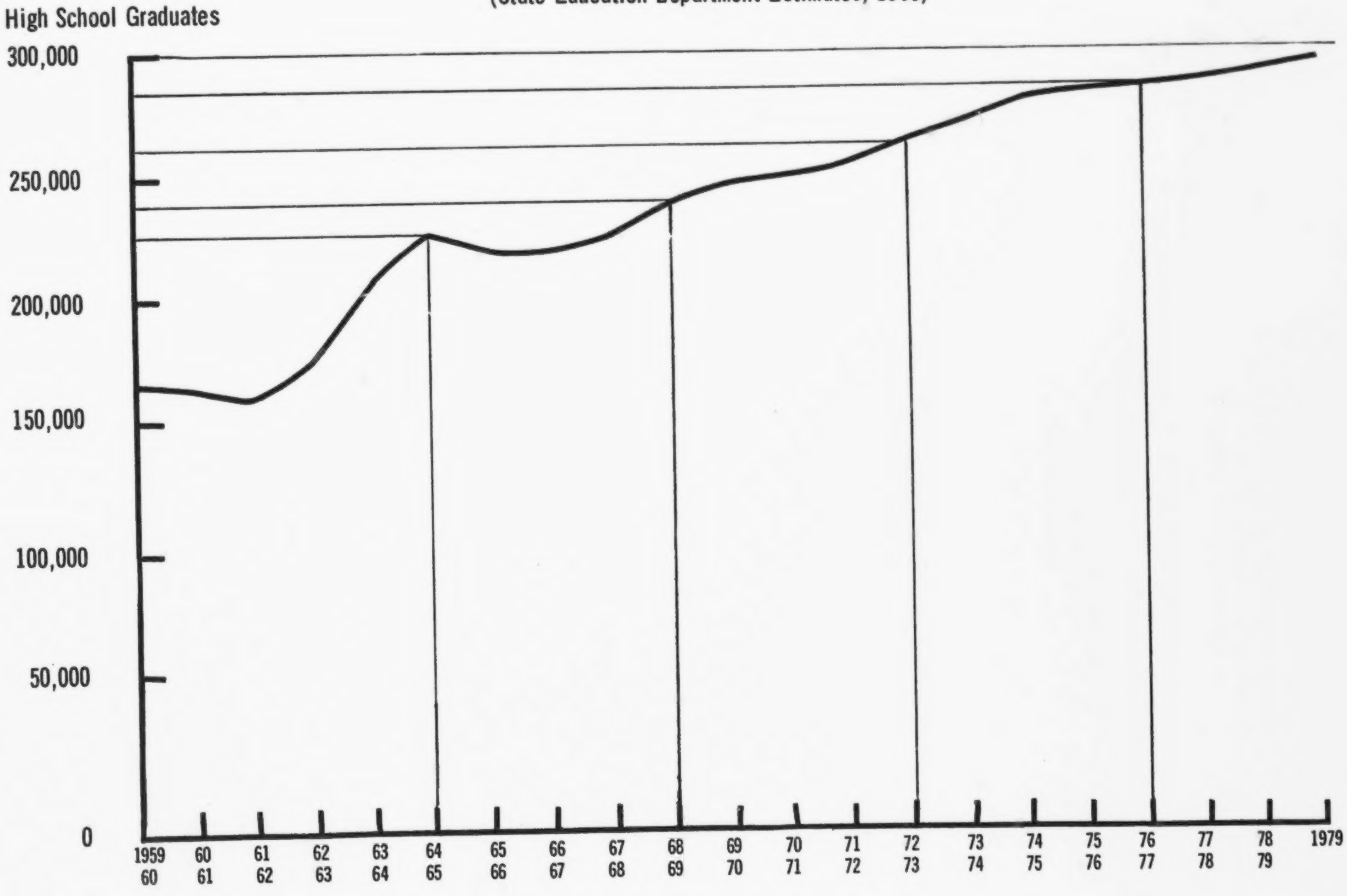


FIGURE 3
Number of High School Graduates
New York State, 1959 - 1979
(State Education Department Estimates, 1963)



higher education as an appropriate means to satisfying and productive lives. Rising aspirations make education beyond high school conceivable for many and rising incomes make it possible.

Beyond having to serve a rapidly growing population and its rising aspirations for education, higher education must meet the steadily increasing demands for greater knowledge and a higher level of skills. A heavy responsibility for developing a thinking public and for building the necessary skills rests on the colleges. College enrollment, therefore, has been rising in recent years even when the number of high school graduates remained almost constant.

POTENTIAL FOR COLLEGE ATTENDANCE

How many people should attend college or other postsecondary institutions? The answer to this question is, ideally, all who have the capacity and the desire to benefit from postsecondary instruction of any kind. Otherwise human resources are wasted and consequences develop for both the individual and the society which are costly beyond measure. Postponement of an all-out effort for higher education postpones the bill; but eventually when the bill has to be paid, it will have increased by a staggering amount.

The proportion of a population that has the ability and desire to benefit from postsecondary education cannot be determined precisely. Views on the subject vary widely. The Regents base their estimates on two approaches. One widely acknowledged measure is the conclusion reached by the President's Commission on Higher Education in 1947. After analyzing results of an extensive testing program, the Commission held that at least 49 per cent of our population had the ability to complete two years of post high school general and vocational studies and 32 per cent were capable of completing an advanced liberal or specialized professional education.[5] The 1947 Commission also concluded that these were conservative estimates. The second measure used by the Regents is the relationship between scores achieved by New York State high school seniors on the Regents Scholarship Examinations and their success in collegiate programs. The Regents Scholarship Examinations are the nearest approach to a statewide testing program now available in the State. This measure establishes an even higher potentiality than that resulting from application of the standards of the President's Commission on Higher Education.

The estimates of undergraduate college-going **potential** of 18-21-year-olds within the New York State population based on these two measures are designated in this Plan as Potential A and Potential B. If the first measure (Potential A) turns out to be the correct one, some 480,000 persons could be in college on a full-time basis by 1970 and 547,000 by 1980; if the higher potential (Potential B) were to be reached, these figures would become 612,000 and 708,000.

PROBABLE COLLEGE ATTENDANCE

But what will actual college enrollments in the State likely be? How will these compare with the suggested "potential" or "ideal"? Actual undergraduate enrollment in New York State has fallen far short of the "potential" based on even the lower of the two measures described. In 1963-64, enrollment of full-time undergraduate students was nearly 150,000 under the estimate based on an application of the 1947 Presidential Commission standard of college potential to New York State population. The addition of part-time enrollment to full-time enrollment still leaves a gap of approximately 65,000, and further adjustments for migration of students in and out of the State does not reduce the gap substantially.

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[5] **Higher Education for American Democracy,** a report on the President's Commission on Higher Education, Volume I, Establishing the Goals, pages 39-41. New York: Harper & Brothers, 1948. The Commission came to its conclusions after correlating (1) scores indicating the mental ability of our general population (Army General Classification Test scores) and (2) scores indicating reasonable expectations of completing college programs successfully (American Council on Education Psychological Examination—1942 college edition).

To project actual college enrollment is difficult because of the number, variety, and uncertainty of the variables which may affect the demand for college places. In order to test the consequences of alternative assumptions, two projections were made. One was based on the average trend of actual enrollments over the past five years, and the second was based on the more rapidly accelerating rates of the last two years and on optimistic assumptions of capability of the State's colleges and universities to expand to handle students as rapidly as they may demand admission to college. The result of applying these two projection techniques to full-time undergraduate enrollment and to full-time enrollment of all students is shown in Figure 4. By the end of the decade, the State can expect between 431,000 and 445,000 full-time students in college. This represents an increase of between 43 and 50 per cent over the fall of 1964.

The two estimates of undergraduate "probable enrollment" are related to the two estimates of "college-going potential" as shown in Figure 5. The implication of this comparison for the effort the people of the State should make in higher education is striking. There is a dual job ahead—formidable in both of its aspects. One is actually to enable the colleges to accomplish their planned enrollment objectives and thus bring the estimates of "probable enrollment" to fruition; the second is the enlarge the "probable enrollment" as much and as fast as possible in order to come close to the "ideal" as expressed by "college-going potential" in the State.

PROBABLE ENROLLMENTS, BY CLASSIFICATIONS OF INSTITUTIONS

The projections of probable statewide enrollment were carefully made and give a realistic figure of the total full-time enrollment that can be expected. However, there is still another question: What portion of this statewide enrollment is to be accommodated by different institutions and categories of institutions in New York State? Estimates of full-time enrollment to be expected in the several New York State categories of institutions from 1964 to 1970 which can be used with reasonable confidence as a basis for planning are summarized and presented graphically in Figures 6 to 8. These estimates were made by extrapolating recent enrollment trends by categories of institutions, adjusting these trends for probable changes, and applying the resulting shares of full-time enrollment to the average trend projection of statewide enrollment discussed above.

The magnitude of the task just ahead and the increasing role expected of the two-year institutions are shown graphically in Figure 6. Total full-time enrollment will increase nearly 45 per cent between 1964 and 1970. That in two-year colleges will jump almost 100 per cent. Figure 7 graphically presents enrollment as it is likely to be distributed among different groups of two-year institutions, while Figure 8 shows how enrollment in four-year institutions is expected to be distributed among the privately controlled institutions, City University, and State University.

SOME REGIONAL VARIATIONS

New York State is a composite of social, economic, and geographic regions, each with a different pattern of likely future development. This fact was recently described in vivid fashion by the Governor's Regional Planning Commission.[6]

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[6] **Change/Challenge/Response: A Development Program for New York State.** Office for Regional Development, Albany, 1964.

FIGURE 4
Full-Time Fall Enrollment,
All Students and Undergraduate Students,
in New York State Institutions
1960-64 Actual; 1965-78 Projected

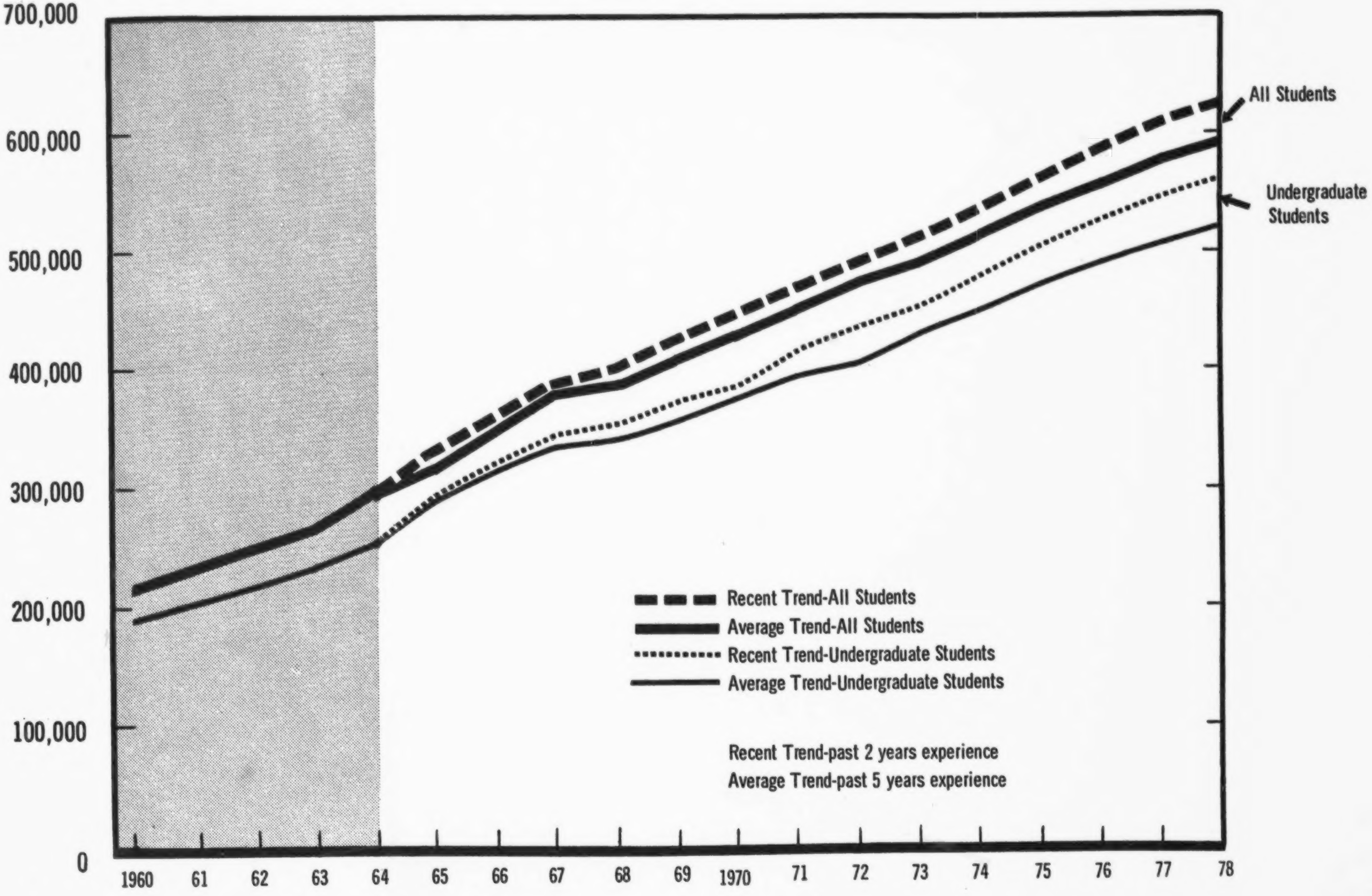


FIGURE 5
Estimates of College-going Potential
and Probable Full-Time Undergraduate Enrollment
New York State

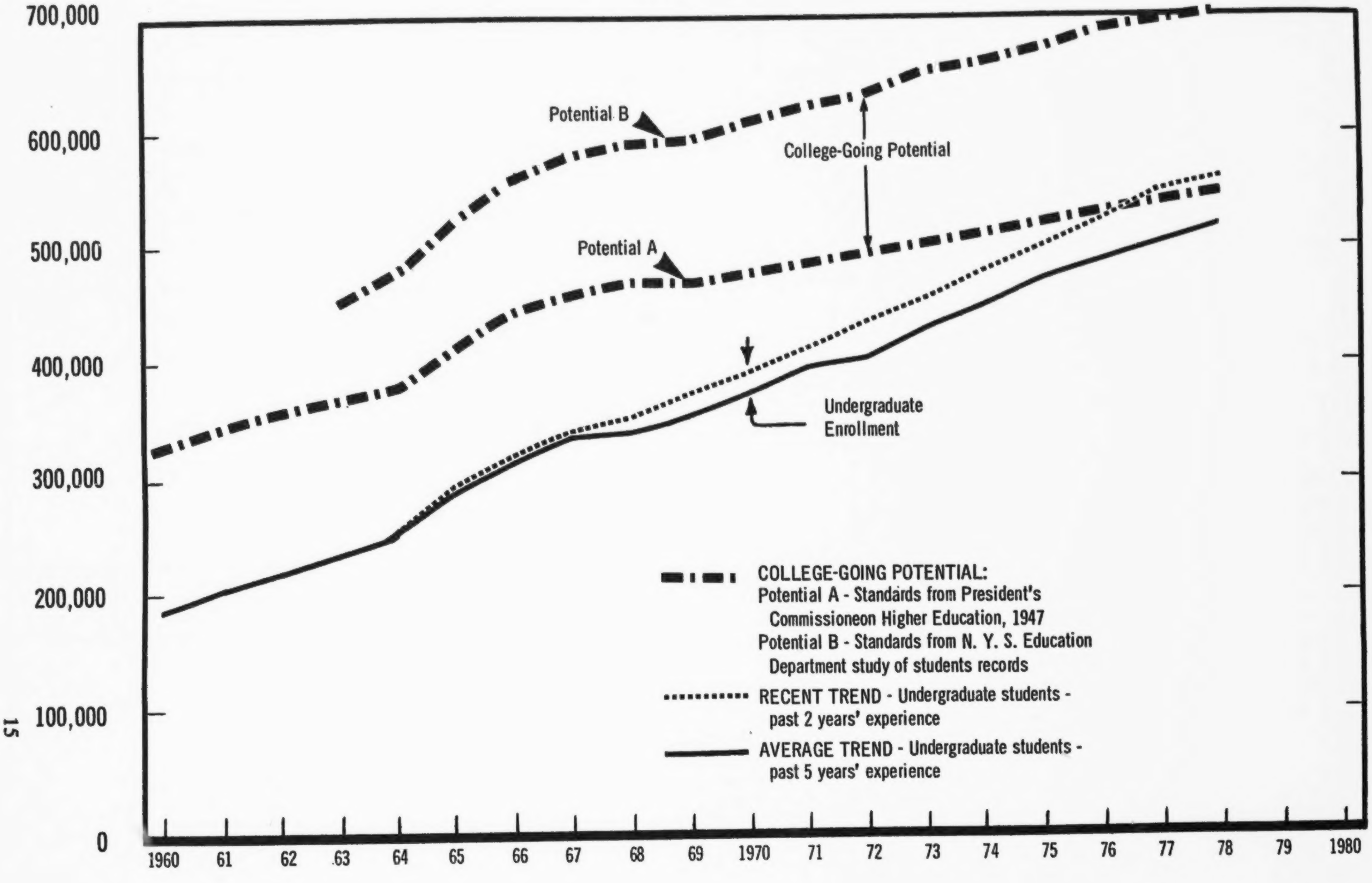


FIGURE 6
Distribution of Full-Time Graduate and Undergraduate Enrollment into 2 and 4-year Institutions New York State

(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)

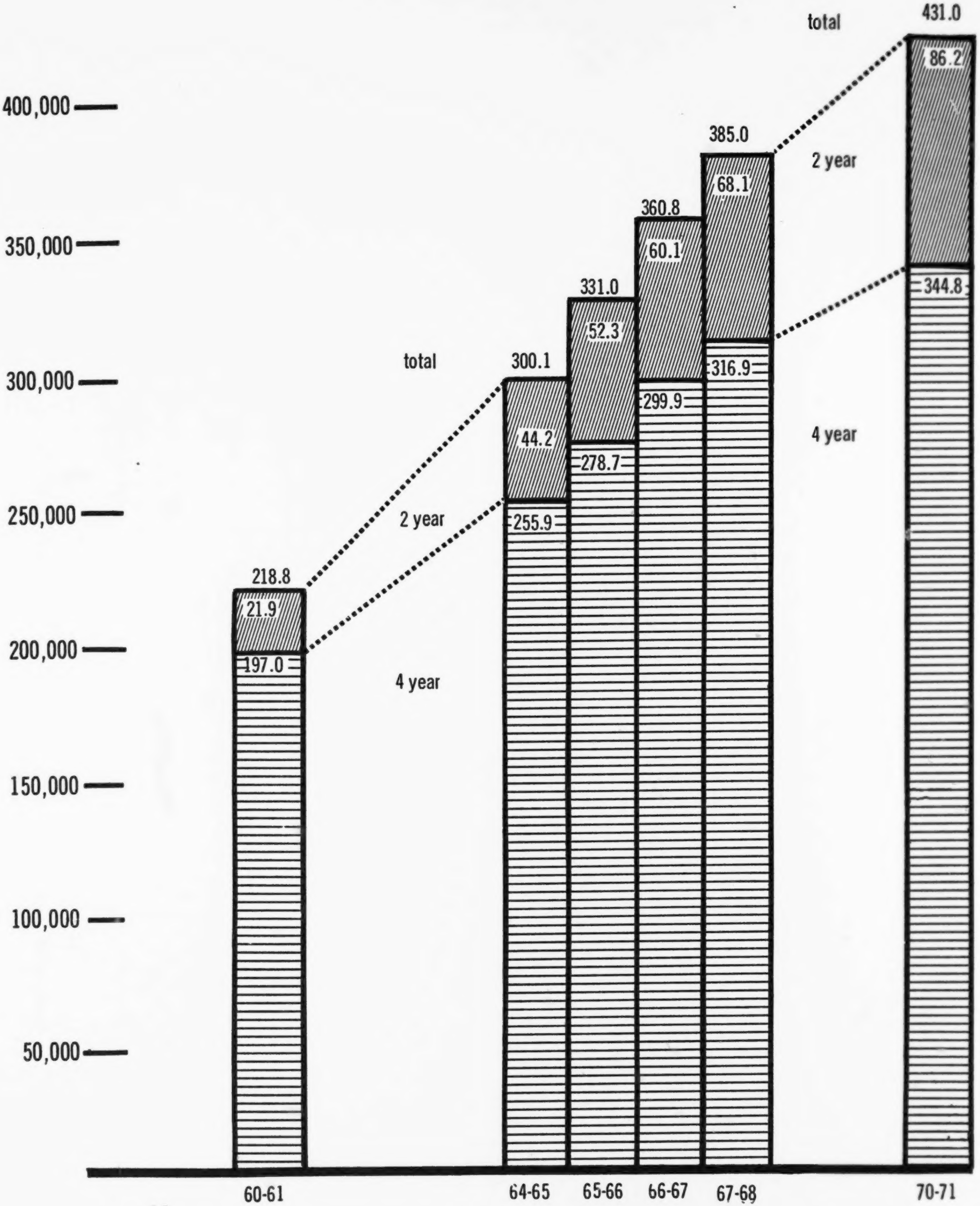


FIGURE 7
Distribution of Full-Time Undergraduate Enrollment in 2-year Institutions, New York State
(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)

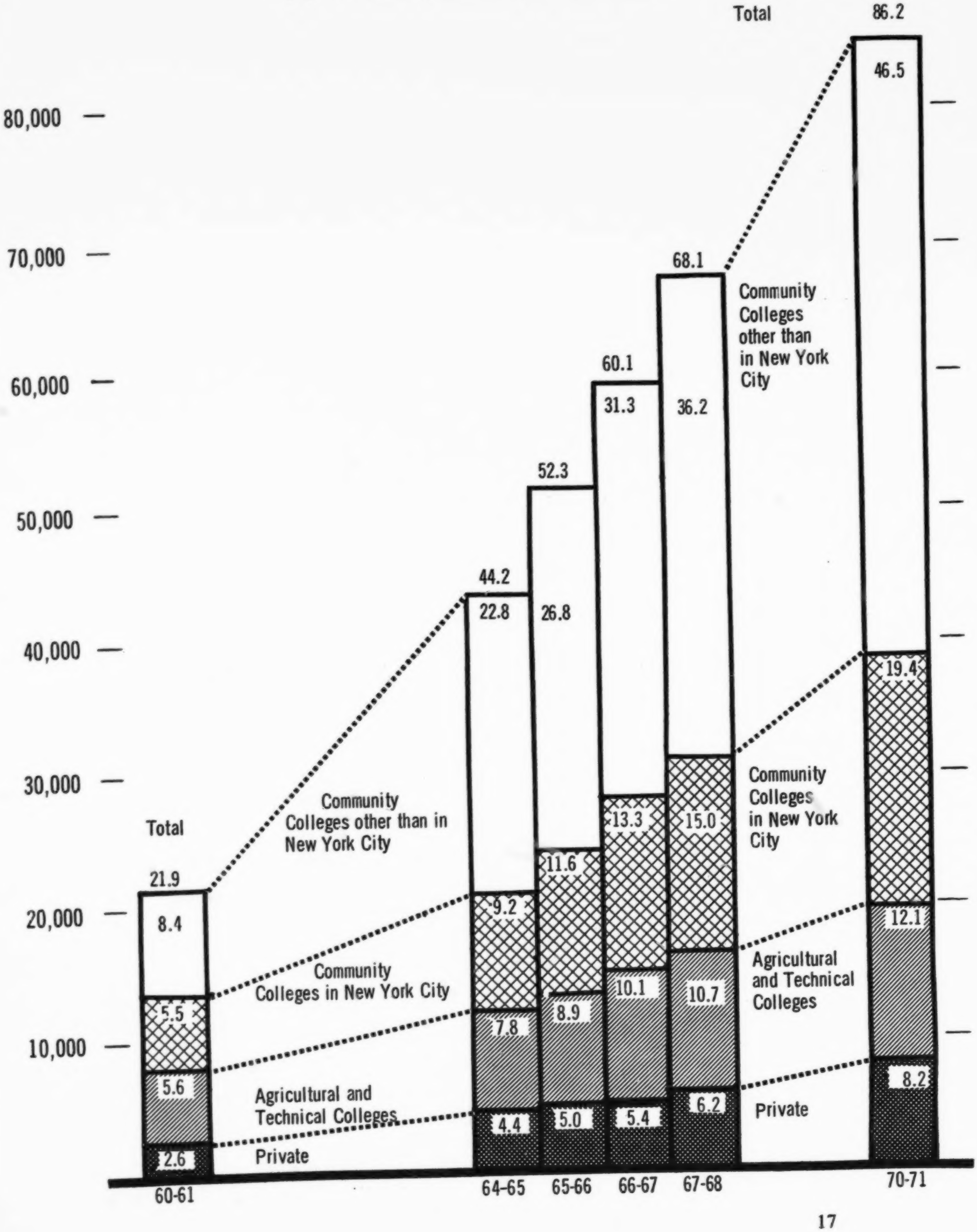
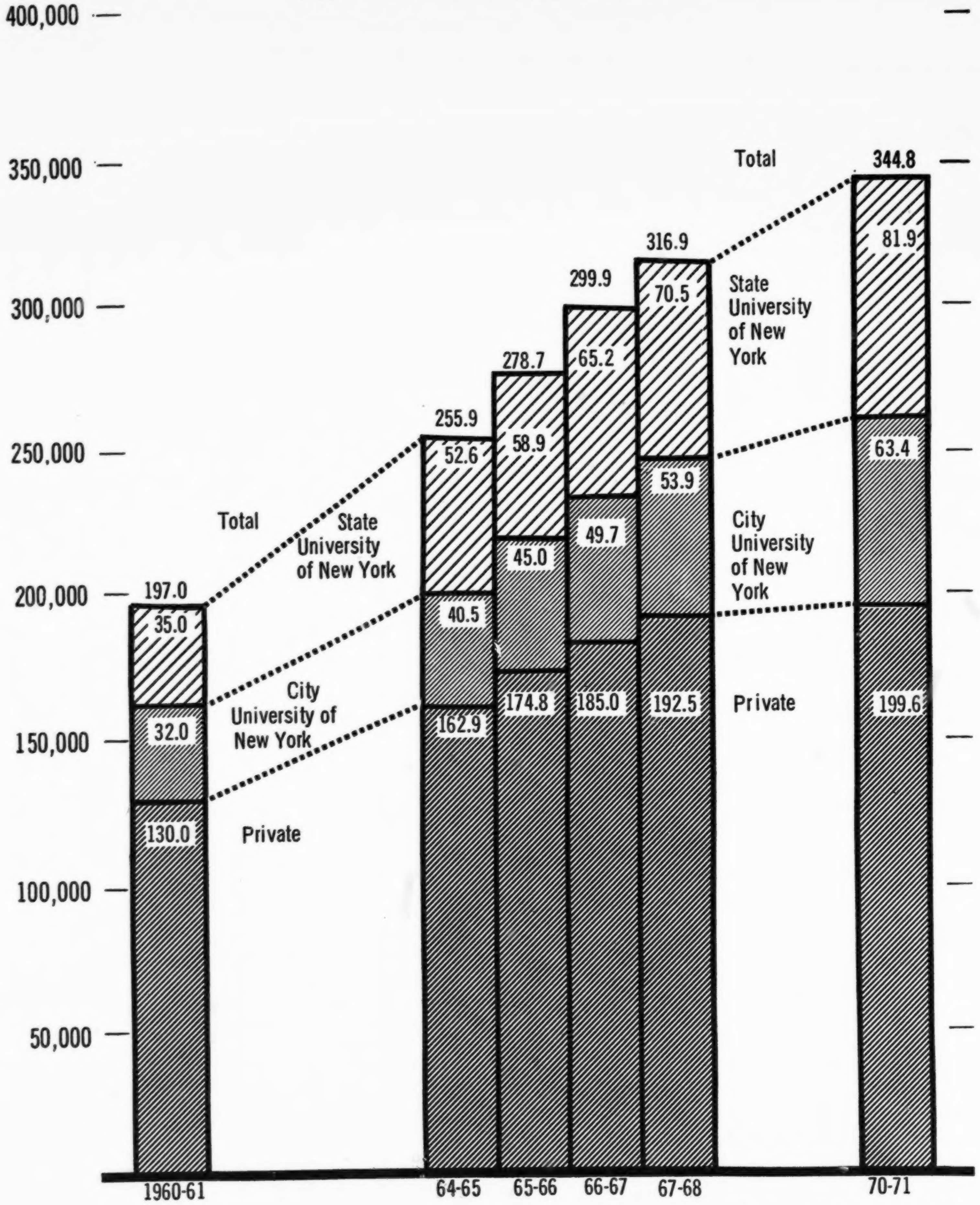


FIGURE 8
Distribution of Full-Time Graduate and Undergraduate Enrollment in 4-year Institutions, New York State *
(Estimates for 1965 to 1970 based on average trend projection of total enrollment.) (Figures in thousands)



* The enrollment of the former University of Buffalo was included with State University of New York in 1960-61.

Higher Education in New York State must be prepared to cope with wide variations in the number of students residing in different regions, as well as with other differences among the regions. Variation is striking among the regions, for example, in the numbers of residents of the different regions who are attending college anywhere (in the State or outside); in this report the number of such students for a given region is called "enrollment originated." The New York Metropolitan Area, which was the residence of nearly 100,000 full-time undergraduate college students in 1963, is at the top of the list in student members, while the Northern Region, with fewer than 5,000 students residing in its boundaries, is at the bottom. As already stated, these students may seek college attendance at colleges within the region, in other regions within the State, or indeed, outside the State entirely. The amount of "enrollment originated" is important for evaluating regional needs for expansion in higher education in each region, and for recognizing the implications of differential rates of growth. Table 1 presents data for the twelve regions into which the State has been divided for higher education planning purposes, and makes clear the regional pattern of the demand for higher education as measured by the residence of the student.

TABLE 1—Estimated Undergraduate Enrollment Originated in New York State by Economic Regions

Region	Estimated Enrollment			Increase	
	1962	1965	1970	1962-65	1965-70
Binghamton	5,325	6,406	7,851	1,081	1,445
Buffalo	21,934	25,756	34,603	3,822	8,847
Capital District	11,866	13,840	17,316	1,974	3,476
Elmira	5,513	6,434	8,028	921	1,594
Mid-Hudson	9,734	11,701	15,384	1,967	3,683
Mohawk Valley	5,915	7,115	8,854	1,200	1,739
New York Metropolitan	157,929	186,577	236,868	28,648	50,291
New York City	(99,842)	(112,859)	(133,654)	(13,017)	(20,795)
Long Island	(39,980)	(52,151)	(74,197)	(12,171)	(22,046)
Rockland-Westchester	(18,107)	(21,567)	(29,017)	(3,460)	(7,450)
Northern	4,836	5,613	7,016	777	1,403
Rochester	11,713	14,276	18,465	2,563	4,189
Syracuse	10,147	11,915	16,131	1,768	4,216
State Total	244,912	289,633	370,516	44,721	80,883

Migration of students to attend college within the State and outside is very large. It reflects students' preferences for institutions, programs, and geographical locations, as well as relative costs of attendance, the pressure to gain acceptance at a particular institution, and institutional choices. The needs of individuals can be served most economically when students are not forced by program or space limitations to migrate across the State or across the nation to find an institution which can supply the education desired. More detailed discussion of the migration patterns of New York State college students will be presented in Part V.

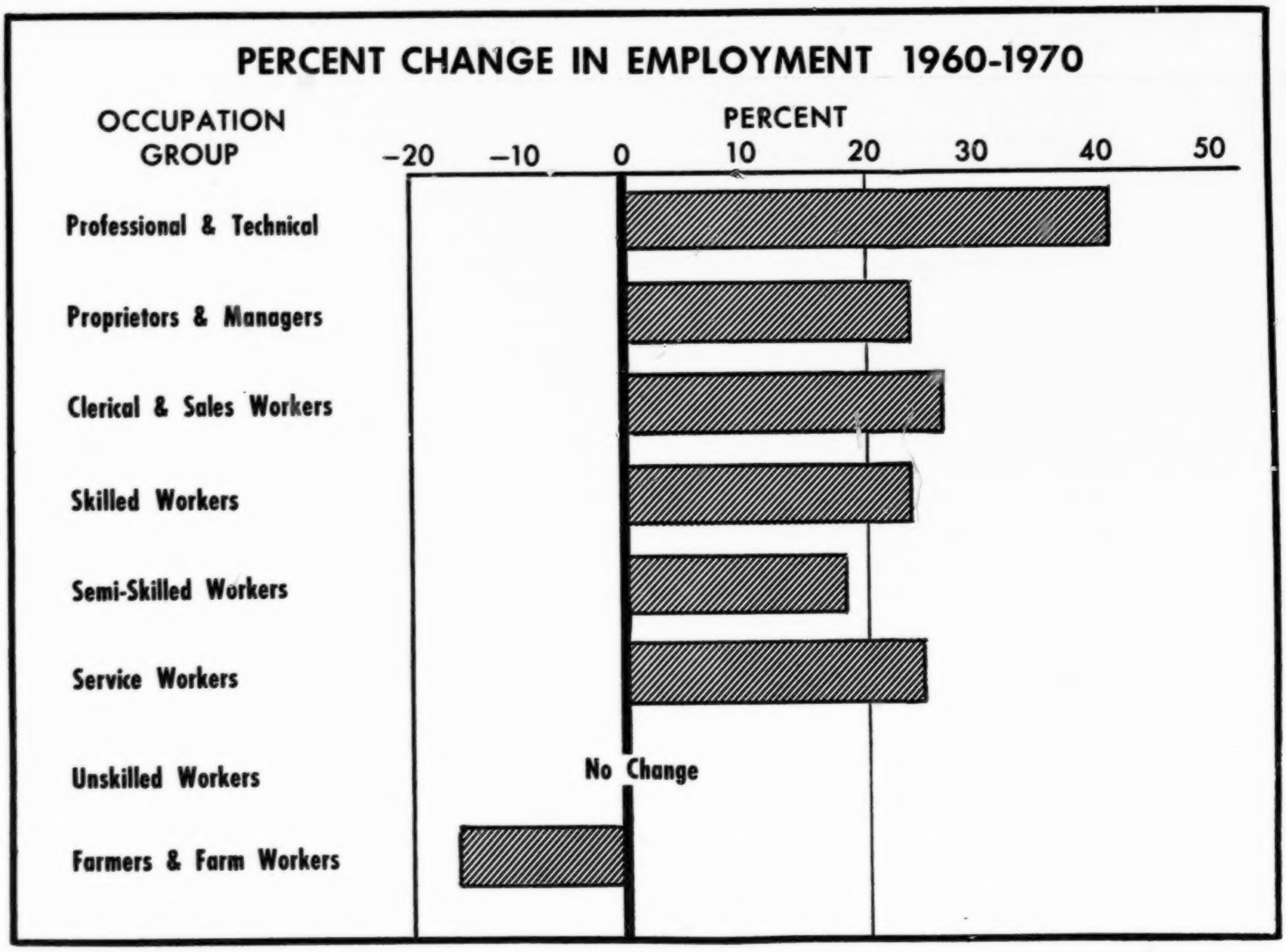
The salient points of the foregoing discussion of statistics on college enrollment and college places in New York State can be summarized as follows. By 1970 it is expected that the number of college-age youth (18-21-year-olds) will total 1,200,000. In that year the number of high school graduates will be almost 250,000, or for four years aggregated, nearly 1,000,000. From this basic population group, it is estimated that there is a college-going potential of between 480,000 and 612,000 persons. Not all of these potential college students will enroll, however, unless there are changes in attitudes toward college attendance held by the general public, or more importantly, by certain sub-groups within the general society; in present practices in college admissions; and in character of programs of post-secondary school education available. At the same time, it should be observed that some persons beyond typical college age will enroll in college. Taking all this into account, it is estimated that by the end of the decade, between 431,000 and 445,000 full-time students will be in college. Thus the gap between potential and probable in 1970 will range between 49,000 and 181,000. Plans currently reported by private higher educational institutions, State University of New York (including the community colleges), and City University of New York, if implemented fully, indicate that places enough to accommodate the higher of the projected probable enrollments will be available in 1970. The approximate percentage of the total enrollment expected in 1970 is estimated for each major segment of higher education as follows: private colleges and universities, 48 per cent; State University of New York four-year units, 19 per cent; City University of New York four-year units, 15 per cent; and the public two-year colleges, 18 per cent. If this enrollment is reached, significant progress toward moving the probable toward the potential college enrollment will have been achieved.

2. NEEDS OF THE ECONOMY AND OF SOCIETY

There is another way to describe the needs for higher education. This is to point out the needs of the economy and society for trained manpower to fill its many jobs. In the broadest sense, the task of the educational institutions will be to fit a growing and changing labor force into the growing and changing kinds of occupational positions. Beyond this, it is to identify and train leaders for society's future. This Plan is not the place, even if space permitted, to engage in a detailed analysis of the trends in the composition of the labor force and in manpower requirements which are placing new demands upon institutions of higher education. Analyses of this kind are well publicized in such reports as **Jobs 1960-70: The Changing Pattern,** published by the New York State Department of Labor, the various studies and reports of the U. S. Department of Labor, and special studies by interested groups.

The results of these various analyses are in general agreement and the trend can be summarized as follows: The kinds of occupations which will experience the most rapid expansion are those in the professional, higher level managerial and technical areas, and these in turn call most heavily on the institutions of education beyond the high school. Figure 9 shows graphically the future look for occupational change and the growing stress on manpower with advanced training. Also, at least for the remainder of this decade, the changes in the labor force will result in a relative scarcity of men and women in the prime working ages. The manpower development task of the educational institutions, therefore, will be to fill this gap by expanding their ability to prepare four groups of people to hold productive and responsible positions at higher levels in the job scale: the youth, the older worker, the nonwhite worker, and the woman who seeks a return to remunerative employment.

FIGURE 9
Growth of Occupational Groups, 1960-70, and Years of Education Completed



Average years of school completed of those working in 1959

Occupation Group	Years
Professional & technical	16.2
Proprietors & managers	12.4
Clerical & sales	12.5
Skilled	11.0
Semi-skilled	9.9
Service	9.7
Unskilled	8.6
Farmers & farm workers	8.6

Source
U. S. Department of Labor

SPECIALIZED MANPOWER NEEDED

The most rapidly growing category of occupations is the technical and professional. Entry into these occupations places the greatest demand on college and university facilities. The preparation needed is specialized, complex, and frequently lengthy.

Most rapidly growing occupations will be in the areas of college faculty, engineering, physical and biological sciences, and interdisciplinary scientific positions. These occupations will also place the heaviest pressures on advanced training facilities for work at the doctoral level and beyond.

The health professions will experience nearly as large an expansion, and, if the best of available medical care is to be extended to a larger proportion of the growing and aging population, a much greater expansion will be needed.

The professional opportunities in law, accounting, library science, and social science will increase somewhat less rapidly than those listed above, but at a rate well above that of the general expansion of employment and, likewise, will require vigorously expanded undergraduate, graduate, and professional educational facilities.

Table 2 indicates the relationship between the estimated annual need of selected professional occupations and the number of first degrees awarded in 1962. Even if all recipients of first degrees in these selected fields enter employment in this State (an expectation that cannot realistically be held), they will by no means meet our needs. An expansion, in some cases reaching very high proportions, must be undertaken. The need for accountants and auditors, for example, is triple the number of degrees awarded.

TABLE 2—Estimated Annual Needs in Selected Professional Occupations and Degree Production in Related Academic Fields in New York State

Occupation	Est. Annual Need	No. of 1st Degrees Awarded, 1962	% Increase Needed
Accountants & Auditors	4,900	1,651	197
Architects	270	146	85
Dietitians	350	19[1]	1,742
Engineers	8,650	3,010	187
Health Sciences			
Dentists	570	236	142
Nurses	4,900	3,482[2]	41
Pharmacists	540	455	19
Physicians	1,425	947	50
Lawyers	2,140	1,314	63
Librarians	561	325	73

[1] Refers to degrees in Food and Nutrition in Home Economics programs.
[2] Graduates of Diploma, Associate Degree and Baccalaureate Degree programs for the year ending June 30, 1962.

The technical or semi-professional occupations also will be expanding at very high but not uniform rates. It is difficult to draw a clear line of distinction between these occupations and those of the engineer or scientist at one extreme, and the semi-skilled or craft occupations, at the other. These occupations are closely related to the engineering and scientific occupations, since the technicians both assist and, in some cases, replace higher-level technical employees. However, under careful and rigid definitions recent studies indicate that nearly 150,000 people are employed in technical occupations in New York State. Recent evidence indicates that employers were actively seeking to recruit nearly 5,000 technical and semiprofessional workers, which is a measure of the presently unfilled need.[7] This demand will further increase with the over-all expansion of technical and professional employment in the State. Table 3 indicates some of the areas of high-level employment.

TABLE 3—Employment in Technical Occupations New York State, 1962

Occupation	Number	Per Cent
Draftsmen	20,972	14.1
Structural Design Technicians	2,516	1.7
Electronic or Electrical Engineering Technicians	19,585	13.2
Mechanical or Electro-Mechanical Technicians	22,446	15.1
Mathematics Technicians	831	0.6
Physical Science Technicians	8,969	6.0
Biological, Medical, Dental, and Related Science Technicians	25,445	17.1
Industrial Engineering Technicians	6,901	4.7
Civil Engineering and Construction Technicians and Specialists	13,464	9.1
Sales and Service Technicians	1,932	1.3
Technical Writing and Illustration Specialists	3,034	2.0
Safety and Sanitation Inspectors and Related Specialists	4,084	2.7
Product Testing and Inspection Specialists	8,059	5.4
Data Processing Systems Analysis and Programming Specialists	6,153	4.1
Airway Tower Specialists and Flight Dispatchers	1,373	0.9
Broadcasting, Motion Picture & Recording Studio Specialists	2,920	2.0
	148,684	100.2

Source: Forthcoming publication of New York State Department of Labor, **Technical Manpower in New York State**, Vol. 1, Chapter II, Table D.

COLLEGE FACULTY—A SPECIAL CASE

Faculty is the key to quality as well as quantity of opportunity in higher education. Colleges and universities in New York State historically have been able to attract able and dedicated teachers, scholars, and researchers. That they will continue to be able to do this depends much on the steps taken now with an eye to the future needs of the State.

That the need for more college faculty is outstripping the supply is generally recognized as a nationwide problem.[8] Concern about a concomitant decline in quality of faculties has increased in recent years. More and more, colleges and universities are having to hire persons with lower qualifications for academic work. The National Education Association's latest nationwide study of this matter found, for example, that whereas in 1953-54 some 31 per cent of new college teachers in institutions with programs of four years or more had earned doctor's degrees, the proportion had decreased in recent years to approximately 25 per cent; the percentage of new teachers having no formal education beyond the master's degree, on the other hand, has jumped from 32 per cent in 1953-54 to 40 per cent in 1961-63.

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[7] **Technical Manpower in New York State**, Volume 1, Chapter II, Table D. Forthcoming publication of N. Y. State Department of Labor.

[8] Ray C. Maul, **Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1961-62 and 1962-63.** Research Report 1963-R3, National Education Association, Washington 36, D.C.

Comparisons of faculty in New York State colleges and universities with those of institutions included in the National Education Association nationwide study were made possible by cooperation of the national association. The eighty-five New York State institutions participating in the nationwide study indicated that colleges in this State, in comparison to like colleges nationwide, have been generally successful in recruiting competent and qualified staff through the fall of 1962 (the latest year of available statistical data for this comparison). In the fall of 1962, approximately 57 per cent of the faculty in private four-year colleges in New York State had the doctorate as the highest earned degree, 62 per cent of those in City University of New York four-year units, 50 per cent in State University of New York four-year units outside of the contract colleges, 14 per cent of the private two-year colleges, and 12 per cent of those under public auspices. These statistics compare quite favorably with national statistics for similar categories of institutions.

Examination of some trends in recruitment of **new faculty** in New York State institutions in comparison again with like institutions in the nationwide study brings out some warning signals. The private universities, for example, in 1961-62 and 1962-63 employed a smaller percentage of new faculty with earned doctorates than their counterparts on the national scene. Consequently they employed proportionately more persons whose highest earned degree was the master's. The four-year units of State University of New York also followed this pattern with even larger differences seen between these colleges and state colleges in the nationwide study.

A comparison of New York State's recruitment of faculty in various subject matter fields and the national pattern shows the task ahead. Out of a total of 23 groupings of academic fields, the ten demanding the greatest numbers of new faculty by 1970 will be the biological sciences, business and commerce, education, engineering, English, fine arts, foreign language, mathematics, physical sciences, and the social sciences. This does not mean that these are all areas of present or projected shortage. It does indicate, however, that graduate education should give additional emphasis to these areas if faculty supply is to maintain or improve present levels of professional competence. Critical fields of shortage, both for the nation and for colleges in New York State, exist in the biological sciences, English, foreign languages, mathematics, physical sciences, and some fields in the social sciences, such as economics and sociology.

Within the group of community colleges and technical institutes a special area of critical shortage exists: instructors in fields which train technicians and semi-professional personnel. The public two-year institutions are recognized as the chief source of supply for these kinds of workers, but the sources of supply of instructional personnel to staff the programs are woefully few and weak.

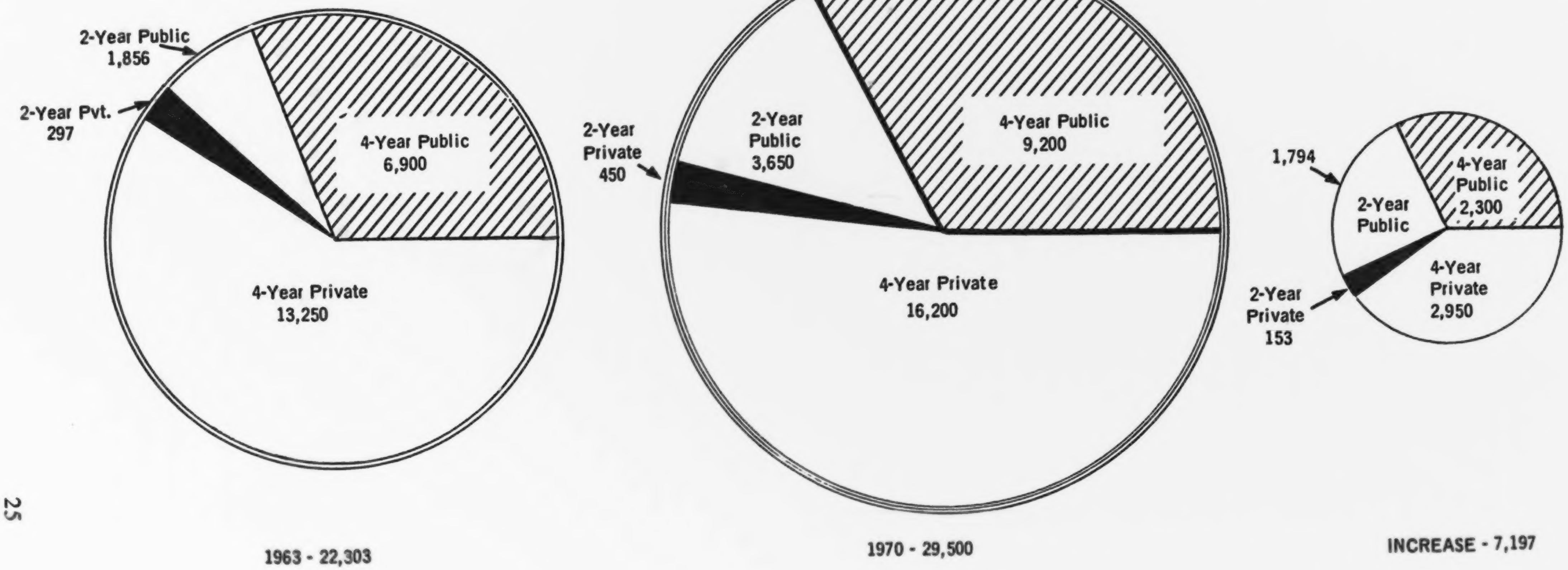
The big push for new faculty members in New York State colleges and universities is just ahead. It will occur in the period of 1964-68 during which the large jumps in enrollment already reported will occur. The dimensions of the increase expected between 1963 and 1970 are shown in Figure 10. By the end of the decade, the State will need almost a third more full-time faculty in its higher educational institutions than it had in 1962.

FULL USE OF HUMAN RESOURCES

No examination of the needs of the economy and of society would be complete without reference to potential waste of human resources through lack of training for special segments of our population.

FIGURE 10

Full-Time Faculty, Higher Institutions, New York State
1963 Actual - 1970 Estimated



The U. S. Department of Labor estimates that between 1960 and 1970 women in the labor force will increase at a rate almost double the rate for men. Many of these potential workers will be women returning to the labor market after careers as homemakers. In these cases the training and experience of ten to twenty years before will need marked updating, perhaps on a part-time basis, so that the skills can be put to current use.

A more basic need is to prepare the coed of today so that fifteen or twenty years hence she will be able to return effectively to the labor market with a minimum of additional training. For these, no less than for the "career" woman, the need is to plan in college for a career rather than a job, to maintain high-level academic performance, and to continue into specialized training at the graduate level whenever possible.

The greatest waste of human resources in society today occurs in the nonwhite, minority, and culturally deprived groups, for whom education represents almost the only peaceful means of breaking out of the deprivation in which they live. The New York State Department of Labor has estimated that by 1970, nonwhites will constitute 12 per cent of the labor force of the State, as compared to 10 per cent in 1960. Recognition and development of the abilities available in the nonwhite and other minority groups to fill the kinds of positions most needed in our economy is a task and a challenge to all the people of the State. Leaders in higher education have a particular responsibility here. Although the State as a whole is concerned, the most acute need for action is local and regional, necessarily centering in the large cities. The problem in the elementary and secondary schools has been placed dramatically before us in recent years, but it is no less important for technical, general, and professional programs beyond the high school.

MAINTENANCE OF SKILLS AND ABILITIES

Education is now a continuing task for most people. Today's most effective undergraduate, graduate, and professional education programs prepare the student to prepare himself. Educational institutions must, therefore, be alert to assist in the continuing self-education needed by individuals in a dynamic society. The needs of unemployed workers already "automated" out of their positions have to be met as well as the needs of a host of additional workers whose present type of employment will eventually disappear. Today's professional, technical, and managerial personnel face particularly acute requirements in this area of continuing education because new knowledge and new techniques are emerging at a rapid pace in every field. The need for conferences, institutes, workshops, independent study with guidance, and regular classwork for credit or without credit, will bulk large in the years ahead if our colleges and our universities are to discharge their obligations to individuals and to society.

3. CONCLUSION

To provide the quality and quantity of higher education which the citizens expect and society requires will tax both the private and public facilities now in existence and planned to 1970. All types of postsecondary institutions and most types of programs will be under continuous pressure to accommodate the numbers of youth arising from the post-World War II population increase. Adding to the demand will be the growing proportion of the population, youths and adults, seeking further education both as an end in itself and as a means for achieving or holding a position in a competitive society.

By 1970, it is expected that full-time enrollment will reach 431,000, which is an increase of nearly 100 per cent over 1960 and more than 40 per cent over

1964. The rise of part-time enrollment is expected to be almost as great, so that by 1970, New York State colleges will be expected to accommodate about 800,000 full- and part-time students. Full-time undergraduate enrollment, high as it promises to be, still will not include about 20 per cent of the persons who could complete a college program. A continuation of recent trends will not bring a closing of the gap between estimated full-time undergraduate enrollment and a conservative estimate of college potential until late in the 1970's.

The importance of graduate education, including doctoral and post-doctoral study, will continue to be critical. Graduate education not only supplies the high-level technical and professional personnel increasingly in demand by business, industry, and government, but also supplies the faculty in all fields of the arts, sciences, and humanities required to maintain, expand, and improve all of education.

Part III

REGENTS GOALS FOR EDUCATION BEYOND THE HIGH SCHOOL

Cooperative planning is impossible in the absence of generally agreed-upon goals. In the light of the needs summarized in Part II, the Regents have adopted the following objectives as a general guide for the further development of higher education in the State of New York:

1. Equal and open educational opportunity beyond high school for each qualified person who desires such education, the opportunity to be unrestricted by race, creed, or national origin, and to be available until each person's needs for economic and social self-sufficiency are met.
2. A system of post high school education through graduate and professional levels that will meet New York State's needs for trained manpower and higher educational services related to business, economic, and industrial development, to maintain the State's position of leadership nationally and internationally.
3. Continued growth in extent and quality of service by New York State colleges and universities to meet the State's and nation's requirements for research and development equal to the demands of this new age marked by cultural, scientific, and technological revolutions.
4. Equalization of post high school educational opportunity available in each economic-geographic region so that factors of cost and accessibility are more even throughout the State.
5. Full and efficient use of available resources in privately and publicly controlled colleges and universities, as well as other units of The University of the State of New York, such as museums and libraries, by encouraging both individual and collective institutional steps toward expansion, cooperation, and continued improvement.
6. Expansion and strengthening of State University of New York and City University of New York to enable each to take a position of leadership among the nation's public universities, plus a comparable effort directed to the community colleges, to round out the State's system of public higher education.
7. A program of financial support both to public institutions and to individual students which will enable each qualified student to choose an institution appropriate to his needs and interests rather than on the basis of costs.
8. Acquisition of sufficient faculty, facilities, and budgetary support to meet the State's total needs in higher education in respect to both quantity and quality.
9. Acceleration of planning for higher education through an improvement in both quality and quantity of information relating to problems and programs, especially financial, and a more effective communication between State agencies and the individual institutions.
10. Continued improvement in communications among the leadership groups in higher education so that the Regents, college and university leaders, local and state government officials, and business and professional people are well and fully informed of new developments and critical needs in higher education.

Part IV

REGENTS REVIEW AND APPROVAL OF INSTITUTIONAL PLANS

The amendment to the Education Law, 1961, requires the Regents (1) "to review and act upon the proposed plan and recommendations of the State University Trustees and of the Board of Higher Education of the City of New York," (2) to "evaluate all available information with respect to the plans and facilities of private institutions" and then (3) to prepare "a tentative Regents plan . . . for the expansion and development of higher education in the State." The tentative plan is then to be shared with the public through hearings as well as with the boards of control of all colleges and universities. The final version is to be transmitted to the Governor and the Legislature as the Regents Plan for the Expansion and Development of Higher Education.

Part IV is devoted primarily to the first of these responsibilities, namely, the review of the plans of the two public universities. The plans of the privately controlled institutions are referred to at the close of Part IV, but because there is no single comprehensive plan to consider, the contributions of these various institutions are discussed in several sections of Part V.

The plans of the community colleges appear in the long-range plans of the two public universities, since all are under the general supervision of the Trustees of State University, and six of them, located in New York City, are sponsored by the Board of Higher Education of the City of New York. The Regents wish to give the strongest possible support to both the State University Board of Trustees and the local boards of trustees in their efforts to improve and further develop these institutions. The community colleges, forming the fourth main sector of The University of the State of New York, are of critical importance. They serve the other three sectors through their college transfer programs. They serve the community and State through programs preparing for a wide variety of occupations in the fields of health, business, industry, and government. Finally, they provide opportunity for large numbers of students who, for economic or other reasons, must find post-secondary education within commuting distance of their homes.

The development of comprehensive community colleges under the program of State University is of such importance to the total effort in higher education that the Regents issued, during the past year, a policy statement in strong support and have added it to this plan as Appendix F.

The main proposals or recommendations which occur in the summary of the Master Plan of State University are reprinted here and the Regents' position on each is indicated. The same procedure has been adopted to give the Regents' position on the Master Plan of City University. In this case a list of the main proposals was prepared by excerpting sections from the body of the text.

Both plans include a number of proposals which are extremely important for statewide long-range planning and which the Regents approve. These are indicated by the symbol (A). In addition there are a number of statements which are essentially broad objectives or goals. The endorsement and support of the Regents are indicated by the symbol (G). In these instances the Regents expect that after further study and planning, schedules and specific steps for implementation will be proposed. The Legislature made provision for proposing amendments and for an annual report from the Regents summarizing such additions to the Regents Plan.

A few proposals are marked by an asterisk to indicate that these are to be held in abeyance for further study and discussion. On the basis of the information provided and present knowledge, the Regents cannot accurately ascertain the desirability of the proposals when viewed from the standpoint of statewide planning to meet the needs of higher education. This is not to say that the proposals may not have merit within the more limited context of possible solutions to regional or other special problems faced by the universities. The Regents' responsibility is to indicate what the Board thinks best to meet the needs and interests of all citizens and of the State as a whole.

The Regents have instructed the Commissioner and the staff to undertake in the near future joint explorations with the university concerned of every proposal on which a reservation has been indicated. Such explorations are needed to secure additional information and to consider alternative solutions.

Even a limited number of negative reactions to proposals developed by others often receive attention out of proportion to their relative importance. The Regents wish to emphasize, therefore, their enthusiastic approval of nearly all the proposals that appear in each of the Master Plans of the two public universities. These constitute large and fundamental contributions to the Regents Plan and are conservative projections of the role of public higher education in the years ahead. Everyone seriously interested in the future of higher education in the State is urged to read these two documents carefully and completely.[9]

The Regents express deep appreciation on the part of all citizens of the State for the hard work and creative thinking evident in the two Master Plans. The plans are evidence of the able, thoughtful, and deeply committed leadership which the State is fortunate to have in these two large sectors of higher education.

1. STATE UNIVERSITY MASTER PLAN, REVISED 1964

The summary of State University's 1964 Master Plan is reproduced below. The symbols (A, G, or *) just discussed, indicate the Regents' position on each numbered proposal. The page numbers in parenthesis refer to the body of State University's Plan.

> The 1964 revision of the Master Plan focuses principally upon means of achieving identity, unity, and excellence throughout the University. Subject to approval of this revision of the Master Plan and availability of funds, the Trustees propose:

FOR THE TOTAL UNIVERSITY

A 1. That the enrollment goal for State University of New York be 160,500 full-time students in 1970 and 184,500 in 1974. (p. 5)

G 2. That the central staff of the University be enlarged to make possible greater educational leadership throughout the University. (p. 20)

G 3. That the Faculty Senate be strengthened and additional machinery be devised to encourage more faculty participation in the formulation of academic policy. (p. 21)

G 4. That scholarly research and literary and artistic endeavors be strongly encouraged and supported throughout the University. (pp. 14, 15)

G 5. That the in-service education of faculty members be strengthened through additional study and research grants, and by improvements in existing in-service development programs. (p. 10)

G 6. That intercampus conferences and other communications among faculty members of an academic discipline be given greater prominence. (p. 12)

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[9] Copies may be obtained by request addressed to the Office of Planning in Higher Education, State Education Department; Office of the Provost, State University of New York; or Dean of Studies, City University of New York.

G 7. That the University's publications program be strengthened, that appropriate scholarly journals be established, and that a State University Press eventually be established. (pp. 11, 15)

A 8. That the library resources of the University be increased and improved, and that the present holdings be doubled by 1970. (pp. 9, 10)

A 9. That a system of interlibrary loans be established, making the University's total library resources easily available to all units of the University. (pp. 9, 10, 15)

G 10. That an instrument exchange program be created to provide faculty members ready access to expensive and unusual equipment that may not be available locally. (p. 15)

G 11. That educational programs be developed cooperatively among units of the University to permit more effective use of the University's total resources. (p. 21)

G 12. That the programs for admissions, advisement, and placement in each unit be strengthened so that students are provided a broader view of their opportunities. (pp. 11, 12)

G 13. That the transfer of students among units for appropriate reasons be facilitated. (pp. 11, 12)

G 14. That special efforts be made to develop the talents of superior students, by using advanced placement and competency examinations as well as programs for tutorial and independent study. (p. 12)

G 15. That programs of continuing education be expanded, placing particular emphasis upon the retraining of displaced workers, providing refresher courses for professional workers, and meeting the cultural needs of our citizens. (p. 13)

G 16. That programs be devised to aid talented but disadvantaged persons. (p. 13)

G 17. That increased use be made of new instructional devices, including films, programmed instruction, and television. (p. 12)

A 18. That a University-wide television network be established. (p. 14)

FOR THE UNIVERSITY'S PARTS

THE TWO-YEAR COLLEGES

A 19. That plans be prepared either to expand the existing community colleges in Erie, Nassau, and Suffolk Counties, or to establish new community colleges in these counties under boards which presently govern these institutions. (p. 16)

A 20. That community colleges be established in any or all of the following areas when study reveals that such action is desirable and feasible: Genesee County, Herkimer County, and the Elmira-Horseheads and Ithaca-Cortland regions. (p. 17)

* 21. That a branch of the Agricultural and Technical College at Canton be established at Saranac Lake to offer two-year programs in business and technical fields, including nursing. (p. 17)

* 22. That two-year programs in business and technical subjects be instituted at the State University College at Plattsburgh. (p. 17)

A 23. That, under normal circumstances, any new technical programs which would attract students from all areas of the State be established at one or more of the agricultural and technical colleges rather than at the community colleges. (p. 16)

A 24. That, for the foreseeable future, no existing two-year college be expanded into a four-year college. (p. 11)
G 25. That study of the financial and other needs of the community colleges be continued and, where appropriate, recommendations be made for legislative and budgetary action. (No direct reference in text.)
A 26. That a program of studies beyond the master's degree for the preparation of teachers for two-year colleges be established at a university center. (p. 16)

COLLEGES OF ARTS AND SCIENCE

A 27. That new colleges of arts and science be established in Nassau and Westchester Counties. (p. 18)

THE UNIVERSITY CENTERS

G 28. That an institute composed of distinguished professors be established at each of the university centers. (p. 10)
A 29. That doctoral programs be developed in the traditional arts and sciences at the university centers; that, except in unusual circumstances, such programs be developed before doctoral work is developed in more specialized fields; that priorities be established for the development of doctoral programs at each center. (p. 18)
A 30. That the feasibility of establishing a graduate school of library science at a university center be explored. (p. 18)
A 31. That a School of Social Welfare be established at Albany. (p. 18)
A 32. That a Marine Sciences Research Center be established at Stony Brook. (p. 15)

THE SPECIALIZED COLLEGES AND PROGRAMS

A 33. That the faculty of the Graduate School of Public Affairs be expanded and the School's facilities improved. (p. 20)
G 34. That the specialized colleges, including contract colleges, not expand their programs of instruction and research into areas more properly assigned to the university centers. (p. 19)
G 35. That the functions and programs of the contract colleges and the relationship of these colleges to State University be re-examined. (pp. 19, 20)
A 36. That a School of Criminal Justice be established in Albany. (pp. 15, 20)
G 37. That a Center for International Studies be established at Planting Fields, Long Island. (pp. 12, 13)

THE MEDICAL CENTERS

A 38. That a new medical center be established on Long Island as part of the State University at Stony Brook. (p. 19)
A 39. That studies be continued to determine the proper location for an additional medical center to be established during the 1970's. (p. 19)

2. CITY UNIVERSITY MASTER PLAN, 1964

The format and style of presentation used in City University's Master Plan does not identify proposals and recommendations as distinguished from the text. However, statements are made in the text that declare intent and show the planned course of development at City University. The following excerpts summarize the main proposals. The Regents' position and the pages within the body of City University's 1964 Master Plan are recorded in the manner used in the review of State University's Master Plan.

POSITION ON FREE TUITION

* 1. We need no more statistics and no further surveys to make clear that society now functions through a great variety of developed talents. We feel sure that you will see in the next few years the depth of the importance of extending free tuition to the students in community colleges in this city, for it will enable us to reach new levels of college potential. We had made sure that the students in our two "college discovery" programs would not have to pay tuition—this, before free tuition was extended to all community college students. (p. 3)

   Certainly City University's no-tuition policy is related to fiscal policy. It is one aspect of fiscal policy that the Governor and the Legislature have declared to be within the province of the Board of Higher Education, and the law passed in 1961 at the request of the Governor gives the Board that responsibility. (p. 4)

PLANS FOR NEW CURRICULUMS

G 2. Within the next four years, it is anticipated that the University will offer the master's degree in most or all of the recognized academic disciplines. Programs in Russian Area Studies and in Russian Language and Literature will be expanded. (p. 34)

A 3. The next four years should see the development of doctoral offerings in additional fields: within the next two years work leading to the Ph.D. is planned in business, education, physics, mathematics, political science, sociology, speech, and Romance Languages. (pp. 34-35)

G 4. The University will continue to assess its strengths and the needs of students and the community for either new or additional offerings in professional fields such as nursing, optometry, public health, public welfare, library science, and city planning. We shall reevaluate from time to time our present rather cautious attitude toward entering the fields of law and medicine. (p. 35)

G 5. The University anticipates interdisciplinary offerings and special programs at the graduate level bridging the fields of the sciences, the social sciences, and the humanities. The structure of the graduate program will be kept sufficiently flexible to accommodate emerging needs in these and other interdisciplinary areas. (p. 35)

A 6. The existing urban research activities at the colleges of City University should probably be expanded to form a full-fledged Urban Studies Institute, to support faculty and doctoral investigations on a University-wide basis in a number of fields in which the solution of serious problems which beset the metropolitan area will depend upon the results of basic research. (p. 35)

G 7. City University must prepare teachers who understand the problems of urban teaching and can face them ably and confidently; and it must provide the specialists in the improvement of reading, in guidance, and in other fields who are so desperately needed. (p. 36)

G 8. City University must provide the scholarly leadership in conducting the research and experimentation that are essential if we are to get at the roots of the problems of urban education today. (p. 36)

G 9. Existing programs of undergraduate teacher education appear to be meeting current needs effectively, and no new programs are anticipated in the next few years. Instead, it is expected that programs currently offered will be strengthened and some will be expanded. (p. 37)

G 10. The Senior Colleges have developed cooperative relationships with public schools in which the children are not specially selected, and where the school program is a part of the City school system. Each of the colleges has developed affiliated school relationships which provide valuable experiences in the undergraduate preparation of teachers. The success of this aspect of the program has been great, and it is expected that, at each college, this arrangement will be extended to include more schools, particularly at the secondary level. (p. 37)

A 11. Several new graduate programs for teachers are to be introduced during the 1964-1968 period. For example, City College is planning a program in vocational education. At Brooklyn College and at Queens College, graduate programs in the teaching of foreign languages are being developed. Programs in elementary education with specialization in art and in science are anticipated at Brooklyn College. Programs for the preparation of liberal arts graduates who wish to teach are being planned at Hunter College, Queens College and Brooklyn College, in addition to the program currently conducted by City College. (p. 38)

A 12. Since qualified guidance personnel are vitally needed in the schools, the colleges have expanded and will continue to expand their programs of guidance and school counseling. (p. 38)

A 13. New fields of specialization require new programs of preparation, some of which will be introduced in the immediate future: Hunter College, for example, is planning certificate programs in urban education and in educational technology. A certificate program in school psychology is being developed at Brooklyn College, and in special education at City College. Several programs to prepare specialists in curriculum and teaching are planned; in art, music, social studies, mathematics, and science at City College; in language arts, social studies, and science at Hunter College; and in language arts, mathematics, and science at Queens College. (pp. 38-39)

A 14. There is at present a University committee planning a doctoral program with several specializations in such areas as educational psychology, educational administration, educational evaluation and research, and comparative and international education. (p. 39)

A 15. Except for a collegiate nursing program under consideration at Queens College, no entirely new curriculum is envisaged for the next quadrennium at any of the Senior Colleges, though all the existing curricula are under faculty scrutiny, and where necessary, are subject to revision. (p. 41)

G 16. There are procedures for exempting superior students from required courses, and for enrolling them in honors programs where they have an opportunity to engage in independent and advanced study. Other kinds of adjustments must be made for the student who, in one subject or another, is not quite up to the pace set by the abler students. (p. 42)

A 17. To meet the growing needs in the health areas, it is contemplated that programs in nursing and various medical technologies and therapies will be required at Staten Island Community College. (p. 43)

A 18. The Bronx Community College is planning an extension of its curriculum in the health fields. (p. 44)

A 19. In cooperation with the Departments of Social Studies and Health Education, curricula in the fields of recreational work, camping and in child care are being developed at Bronx Community College. (p. 44)

A 20. Kingsborough Community College plans a new curriculum in business machine technology. (p. 44)

A 21. Borough of Manhattan Community College plans new curricula in advertising and public relations and in business data processing. (p. 44)

A 22. The new Borough of Manhattan Community College will institute a cooperative education (work-study) program as an integral part of its educational offering. (p. 44)

G 23. To the end that undesirable duplication may be avoided, studies of new community college curricula will in every case include full consultation with officers of State University, and with local leaders of business, of industry, and of government agencies. (p. 47)

G 24. With respect to the College Discovery Program, experimental programs for both high school graduates and for high school juniors are proposed. (p. 48)

PLANS FOR NEW FACILITIES

A 25. If, as we expect, enrollment in the doctoral programs will triple by 1968, additional classroom, seminar, library and research facilities will have to be expanded both at the colleges and centrally. The present meager office facilities for faculty must be brought up to standard. (p. 54)

G 26. Closed-circuit or special-channel television is under study by a University committee with the purpose of making maximum use of facilities. (p. 54)

G 27. The University's Council of Librarians is studying ways to use existing separate libraries for the support of graduate programs. The conversion of existing libraries into libraries adequate for a distinguished graduate school will require a substantial investment. (p. 54)

G 28. In addition to conventional research facilities, the University plans to include the establishment of a number of research institutes requiring the acquisition of land, buildings, and equipment. A long-range plan for buildings and equipment will be developed in connection with the annual revisions of this Master Plan. (p. 55)

G 29. A conclusive answer to the question whether a University Press should be established will have to await a future revision of this Master Plan. (p. 55)

A 30. Conference facilities, now in great shortage, must also be supplemented. (p. 55)

A 31. Plans must go ahead at once to acquire necessary land in parts of the City suitable to the University's requirements. Steps have been taken to seek Federal loan funds for the construction of a dormitory for graduate students and young faculty. In the meantime, the University is using temporary facilities at the Bronx campus of New York University. (p. 55)

A 32. Additional and new facilities will be required to increase the scope and effectiveness of the teacher education programs, especially in connection with newer techniques and methods . . . for example, the need for closed-circuit television at Queens College and at City College in conjunction with their affiliated schools and the provision at Hunter College of a demonstration school for the teaching of the physically handicapped. (p. 56)

A 33. During 1964-1968 new construction amounting to $239,328,670 to accommodate an additional 28,800 students is scheduled. (p. 60)

PLANS FOR STAFF RECRUITMENT

A 34. In order to attract senior members of other institutions to City University faculty, an arrangement should be established whereby they may continue their Teacher's Insurance and Annuity Association contract, with the City contributing to TIAA what it normally contributes to the New York City Retirement System. (p. 61)

A 35. In the near future, the provisions of the Teacher's Retirement System, insofar as they apply to the staff of the University, should be modified to meet the standards of the best institutions of higher education in the country. (p. 62)

G 36. Not only must the regular salary schedule be as high as the best in the nation, but there must be enough flexibility to appoint especially distinguished professors at salaries outside the regular schedule. (p. 63)

G 37. The University must accept a major responsibility for providing its graduate faculty members with the facilities required to carry on research. (p. 63)

A 38. The problem of staff recruitment for community colleges will become especially critical as a result of substantially different salary schedules in two-year as compared with four-year colleges. The Board of Higher Education in the 1962 **Long-Range Plan** (p. 18, Sec. 14) recommends that community college salary scales start at the same point as senior college scales and rise with the same increments for the same bylaw qualifications and responsibilities. Major steps should be taken in the next five years to achieve the above recommendation. (p. 64)

A 39. It is essential to remove the discrepancies in hourly rates of pay as between those teaching in community college evening sessions, and those dealing with similar levels of instruction in the Schools of General Studies in four-year colleges. (p. 64)

A 40. The addition of full-time positions in the Schools of General Studies must be accelerated; in the meantime, as the competition for able instructors becomes more acute, the rates of pay for part-time personnel assigned to the teaching of one or two courses must be revised upward. (p. 64)

STUDENT ENROLLMENT POLICIES

G 41. Enrollment policies in the graduate program will be developed along the following lines in the next four years:
   a. Doctoral programs will be designed primarily for full-time students.
   b. Financial aid to graduate students must be greatly augmented.
   c. Pressure for admission of graduate students is expected to mount. The University must be able to attract able married women back to academic life. (p. 65)

A 42. The University plans to keep its graduate tuition at a moderate level and in line with that of other public institutions. An appropriate tuition differential for out-of-State students will be given consideration as soon as an appreciable number of out-of-State students indicate a desire to study at City University. (p. 65)

G 43. Increasing attention must be paid in the years ahead to the accommodation of foreign students. With the United Nations and other international centers attracting hundreds of foreign families to New York City, it is appropriate that the University give thought in its planning to the advanced education of foreign students, and that such planning take into account the activities in this area of its sister universities in New York City. (p. 66)

G 44. It shall be the policy of the Board of Higher Education and of the University authorities to maintain a strenuous and constant effort to secure sufficient financial support both for construction and for operating costs to permit the admission of all applicants who possess the requirements defined below. (pp. 66-67)
   i. *Senior Colleges:*—Graduates of academic high schools who are in the **top quarter** of the entire body of graduates of all high schools, public

and non-public, of every type, are considered, on the basis of our experience over the years, to have the ability to achieve a baccalaureate degree. This top quarter currently comprises graduates with grade averages of 82 per cent or above in high school curriculums leading to academic or commercial diplomas. For the Schools of General Studies conducted by the Senior Colleges, significantly higher standards of admission than those heretofore maintained by those schools are planned and will soon be put into operation.

ii. *Community Colleges:*—In the transfer programs, those who are in the **top half** of the entire body of graduates of all high schools, public and nonpublic. This top half currently comprises graduates with averages of 75 per cent or above in curriculums leading to academic, commercial, or technical high school diplomas.

In the career programs, the criterion of minimum ability consists in both the acquisition of a high school diploma and the attainment of a satisfactory score in an examination or examinations appropriate to the program for which the student is an applicant.

A 45. The State Education Department, in consultation with the colleges and schools, should study the question of vocational education and consider the authorization of the use of particular curricular titles for the different levels of instruction, so as to help avoid confusion in the minds of the public. (p. 67)

ESTIMATES OF POTENTIAL STUDENT ENROLLMENTS

A 46. City University proposes in 1968 to accommodate between approximately 52 and 59 thousand full-time students in four-year colleges; by 1970, they plan to accommodate between 56 and 65 thousand. These expectations are in general accord with those projected by the Office of Planning in Higher Education, which anticipates approximately 56,500 students in 1968 and 61,300 in 1970 for City University four-year colleges. (pp. 68-71)

A 47. Enrollment expectations in community colleges are set in City University's plan at approximately 16,700 in 1968 and 20,500 in 1970. These are somewhat higher than those projected by the State Education Department's Office of Planning in Higher Education, which indicate approximately 14,000 in 1968 and 17,000 in 1970. (pp. 68-71)

A 48. Studies have established the existence of a pressing need for a publicly supported senior college on Staten Island. If plans for such a college are put in motion without delay, a target date of September 1969 for its opening is not unreasonable. These plans are concerned solely with the establishment of a separate senior college on Staten Island and do not contemplate any connection or overlap with the existing Staten Island Community College which is slated to expand in its own field as the needs for it develop. (p. 79)

G 49. Part of the enrollment pressure on the senior colleges arises from transfers from the community colleges and from other advanced standing admissions, and more and more students will take these routes to a senior college in the future. Serious consideration is being given to establishing one of the new colleges with a very small freshman and sophomore class or with none at all. (p. 80)

G 50. Crucial to the development in the 1968-72 quadrennium of five of the community colleges of City University (Staten Island, Bronx, Queensborough, Kingsborough, and Borough of Manhattan) are two factors: the transfer to these colleges, as soon as their capacity warrants it, of the A.A. and A.A.S.

programs now (1964) being conducted in the Schools of General Studies of the Senior Colleges, and the implementation of the plans announced by the City of New York to place the community colleges on a tuition-free basis. When the latter step is taken, the channeling of students to the senior or community college on the basis of ability and academic need will be greatly facilitated. (p. 80)

A 51. As soon as the capacity of Staten Island, Bronx, Queensborough, Kingsborough, and Borough of Manhattan Community Colleges warrants it, and the community colleges become tuition-free, A.A. and A.A.S. programs now (1964) being conducted in the Schools of General Studies of the Senior Colleges will be transferred to these five Community Colleges. (p. 80)

A 52. As more community college graduates transfer to four-year colleges, upper division course work will grow in the Schools of General Studies. At the same time, there will probably be fewer freshmen and sophomores in the Schools of General Studies, with a corresponding growth in the number of part-time students in the evening divisions of the Community Colleges (pp. 80-81)

A 53. On June 15, 1964, the Board of Higher Education approved in principle the establishment of a police college as a four-year college, but only subject to the provision "that such college be and remain under the sole and complete jurisdiction of the Board of Higher Education of the City of New York." It is planned to call the new institution "The College of Police Science." (Attachment to letter from Chairman of Board of Higher Education to Board of Regents, November 19, 1964, offering amendments to 1964 Master Plan as submitted on June 3, 1964.)

A 54. Hunter College School of Social Work. Development of a doctoral program in social work before 1970 is foreseen as a result of expansion of the School during the present quadrennium. (Attachment to letter from Chairman of Board of Higher Education to Board of Regents, November 19, 1964, offering amendments to 1964 Master Plan as submitted on June 3, 1964.)

3. PLANNING BY PRIVATELY CONTROLLED COLLEGES AND UNIVERSITIES

Although detailed plans of privately controlled institutions were not specifically required by the 1961 statute, the Board of Regents was directed to "evaluate all available information with respect to plans and facilities of private institutions." Through the use of questionnaires and conferences with college and university officials, information was obtained on matters of particular importance to statewide planning. Long-range plans projected by some of the privately controlled institutions were also made available on a voluntary basis.

Since the result was not a single plan but a collection of data and plans reported by many different institutions, Regents' comments on the contributions of the plans of the private institutions towards meeting the State's needs in higher education are made in Part V in connection with specific topics.

One general observation that can be made on planning among the privately controlled institutions of higher education is that present practice varies widely and is, in general, inadequate for the years ahead. Some private institutions have well-developed and detailed plans looking five, ten, or even more years into the future. Others have no formally stated plans beyond a year or two ahead. However, it is encouraging to note that some additional institutions are undertaking to prepare long-range plans to guide their future development.

Another general observation is that the privately controlled colleges are drawing increasingly on the fund of information collected by the State Education Department in preparation for this report. They are finding useful for their own planning such data as the studies on enrollment trends, residence and migration of college students, faculty supply and demand, and per-student costs. The data in all of these studies included information on private colleges and were analyzed on a statewide basis. In addition, some were analyzed on a regional basis. The Regents will propose that this program of special studies and research to assist the continuous planning effort of the State be enlarged.

Part V

SYNTHESIS: THE REGENTS PLAN, 1964

This part considers the extent to which the present plans of institutions of higher education will meet the State's needs in a number of broad areas and presents additional proposals from the Regents. Each major section will (1) provide information on the plans of the privately controlled colleges, (2) refer to related proposals advanced in the Master Plans of the two public universities, with comments and proposals from the Regents.

1. TO MEET THE NEEDS OF INDIVIDUALS

One of the primary concerns in State planning throughout the nation is to provide enough places for education beyond the high school. Will there be enough to provide for every able and interested person? Will they be there when needed? Will they be accessible to all?

Furthermore, will the places be the right kind? Neither students nor college places are homogeneous; students have different wants and college places have different characteristics. While the first requisite is enough places across the State to serve the needs of students, a really suitable plan to meet the State's needs in higher education has to take into consideration more than numbers of people and places. It must give attention to the kind, location, cost, and other characteristics of places and the preferences, wants, and needs of students.

Still another fact must be appreciated in a statewide plan for places. Some excess of places is necessary if individual choice is to be respected and reasonable allowance made for proper "fit" of students to programs in college. Practical problems prohibit higher educational institutions from operating at a level of total utilization of plant or faculty. Moreover, geographic accessibility, type of control, varying costs, varying programs, and other factors, when seen against choices desired by students, make a total filling of college places an unrealistic expectation. As a general rule, an excess of about ten per cent of places over full-time students seeking enrollment in college may be considered reasonable and necessary.

PLANS OF THE INSTITUTIONS TO MEET ENROLLMENT DEMANDS STATEWIDE

The estimated statewide enrollment in the different classifications of institutions is shown in Table 4: as of 1970, an over-all statewide enrollment of about 431,000 full-time undergraduate and graduate students, with approximately 208,000 enrolled in privately controlled colleges, 160,000 in State University including the community colleges, and 63,000 in City University. These are the numbers of students expected to be accommodated by each group of institutions. The enrollments are based on the statewide estimates of "probable college enrollment" reported in Part II.

INSTITUTIONAL PLANS

Projections of institutional ability to accommodate students as reported in the Master Plans of State University and City University and as determined by the State Education Department for the privately controlled colleges collectively indicate

TABLE 4

Total Full-Time Enrollment (Graduate and Undergraduate) in New York State Institutions Actual—1964; Estimated—1965-1970

(Based on Average Trend Projection of Total)
(Numbers in Thousands)

	1964		1965		1966		1967		1968		1969		1970		Increase 1964-1970	
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Four Year Units	85.2	255.9	84.2	278.7	83.3	299.9	82.3	316.9	81.6	319.1	80.9	332.5	80.0	344.8	34.7	88.9
Private	54.2	162.9	52.8	174.8	51.4	185.0	50.0	192.5	48.9	191.2	47.8	196.5	46.3	199.6	22.5	36.7
Public	31.0	93.0	31.4	103.9	31.9	114.9	32.3	124.4	32.7	127.9	33.1	136.0	33.7	145.2	56.1	52.2
CUNY	13.5	40.5	13.6	45.0	13.8	49.7	14.0	53.9	14.2	55.5	14.4	59.2	14.7	63.4	56.5	22.9
SUNY	17.5	52.6	17.8	58.9	18.1	65.2	18.3	70.5	18.5	72.4	18.7	76.8	19.0	81.9	55.7	29.3
Two Year Units	14.7	44.2	15.8	52.3	16.7	60.1	17.7	68.1	18.4	71.9	19.1	78.5	20.0	86.2	95.0	42.0
Private	1.46	4.4	1.5	5.0	1.5	5.4	1.6	6.2	1.7	6.6	1.8	7.4	1.9	8.2	86.4	3.8
Public	13.3	39.8	14.3	47.3	15.2	54.7	16.1	61.9	16.7	65.3	17.3	71.1	18.1	78.0	96.0	38.2
Ag. & Tech.	2.6	7.8	2.7	8.9	2.8	10.1	2.8	10.7	2.8	10.9	2.8	11.5	2.8	12.1	55.1	4.3
Comm. Coll.	10.7	32.0	11.6	38.4	12.4	44.6	13.3	51.2	13.9	54.3	14.5	59.6	15.3	65.9	106.0	33.9
New York City	3.1	9.2	3.5	11.6	3.7	13.3	3.9	15.0	4.1	16.0	4.3	17.7	4.5	19.4	110.8	10.2
Other	7.6	22.8	8.1	26.8	8.7	31.3	9.4	36.2	9.8	38.3	10.2	41.9	10.8	46.5	103.9	23.7
State Total	100.0	300.1	100.0	331.0	100.0	360.0	100.0	385.0	100.0	391.0	100.0	411.0	100.0	431.0	43.6	130.9
Private	55.7	167.3	54.3	179.7	52.9	190.4	51.6	198.7	50.6	197.8	49.6	203.9	48.2	207.7	24.1	40.4
Public	44.2	132.8	45.7	151.3	47.1	169.6	48.4	186.3	49.4	193.2	50.4	207.1	51.8	223.3	68.1	90.5
CUNY	13.5	40.5	13.6	45.0	13.8	49.7	14.0	53.9	14.2	55.5	14.4	59.2	14.7	63.4	56.5	22.9
SUNY	30.7	92.3	32.1	106.3	33.3	119.9	34.4	132.4	35.2	137.7	36.0	147.9	37.1	159.9	73.2	67.6

that, if present plans to expand facilities are completed on schedule there will be places enough to take care of all full-time students who seek admission. It should be noted, however, that estimates of probable enrollment for the latter part of the decade when compared to estimates of places available in the colleges and universities of New York State show that the margin of slack between enrollments and places is expected to be reduced significantly and might be eliminated entirely. To preserve a desirable margin of flexibility between enrollments and places toward the end of the decade, therefore, will require a better utilization of facilities as well as maintenance of the planned schedule of expansion.

Of significance, also, is the observation that the combined and coordinated efforts of all of the different segments of higher education will be required for an orderly accomplishment of the enrollment objectives stated. A failure of one group of institutions shown in Table 4 would place an additional and unplanned burden on the others. Conversely, accommodation of a significantly larger number of students by a given group of institutions by actions unannounced in plans thus far reported to the Regents would leave the other groups of institutions with an undue number of unfilled places. In the matter of enrollment planning, as in all other aspects of higher educational operations, New York State colleges and universities must act as a coordinated system.

Among the privately controlled institutions the response of individual colleges to the pressures of larger numbers of applicants varies greatly. Some plan no increase in size in the foreseeable future, preferring to use their resources to meet the increasing costs of operation and to maintain or improve the quality of their offerings. Some feel that a particular size is important to the kind of educational opportunity they provide. Others wish to become more selective in admissions. In general, however, it would appear that most colleges are responding to or anticipating larger enrollments. Even the concept of the ideal size of the so-called "small" college, which has always varied greatly from campus to campus, is changing even more as case studies are completed on the economics of operations and as pressures of various kinds develop, such as from alumni or from the particular constituency to which some are committed.

Most institutions, however, expect to accommodate more students in existing programs. Some also intend to offer a greater variety of programs, in certain cases at a higher level. Many such decisions appear to have been made without careful planning. At the time this Plan was prepared, fewer than 20 institutions had developed comprehensive long-range plans. A few others were in the process of doing so. However, these institutions were the exceptions. Because of the lack of planning and the failure to make critical decisions on the precise nature of the role they expect to play, it is impossible to present a State summary of the plans of privately controlled institutions in any great detail.

On a questionnaire from the State Education Department, 20 private institutions now classified as four-year colleges report that they are planning to offer bachelor's degrees in new fields by 1968. These institutions are spread throughout nine of the 12 planning areas shown in Figure 1, with only the Mid-Hudson, Northern, and Syracuse areas lacking planned new baccalaureate programs. These new programs collectively are expected to accommodate 7,850 full-time students and 1,900 part-time students. This new capacity is reported to be approximately 40 per cent in liberal arts, 25 per cent in education, 15 per cent in engineering, slightly less than 15 per cent in science and mathematics, and the remaining small percentage in the fields of religion, psychology, nursing, language and business. In addition, three institutions that in 1964 offered only two-year programs are planning to extend offerings to the four-year level. They are located in the Buffalo, Syracuse, and Rockland-Westchester areas. Collectively, they plan to accommodate over 1,000 full-time students in baccalaureate programs by 1968.

Of special interest to the State as a whole are the plans of State University to establish new colleges of arts and science in Nassau and Westchester counties and to prepare plans either to expand existing community colleges in Erie, Nassau, and Suffolk Counties or to establish new community colleges in these counties. Regents endorsement of these plans is consistent with the over-all need for more college opportunity in the State and a general expansion of facilities and programs to meet the need. One type of expansion, however, which is strongly opposed by the Trustees of State University, the Board of Higher Education of New York City, and the Regents is the conversion of two-year colleges to four-year status. Adherence to this policy of not expanding two-year institutions into four-year institutions is of critical importance to state planning.

City University's 1964 Master Plan proposes to accommodate in its four-year units the expected 63,000 or more students by 1970 through the expansion of existing programs, the addition of new programs, particularly at the graduate level, and the establishment of a new four-year college on Staten Island.

REGENTS COMMENT AND FURTHER PROPOSALS

The total, full-time graduate and undergraduate enrollment in privately controlled, four-year colleges and universities is expected to rise from about 163,000 in 1964 to nearly 200,000 in 1970. The rise will be irregular and the numbers will constitute a decreasing share of the total, but it is clear that the statewide enrollment burden will continue to fall heavily on these institutions. The surge in enrollment will take effect first in the undergraduate colleges as the larger numbers of high school graduates seek admission, are enrolled, and in larger proportions stay in college for longer periods of time. Thus the initial concern is for sufficient undergraduate college capacity. The best data available indicate that full-time undergraduate enrollment in four-year private institutions will rise to about 142,000 in 1965 and 159,000 in 1970. This will be a more rapid rise than in facilities and will force a much more complete use of them. Computations indicate that whereas over 15 per cent of the undergraduate places in privately controlled four-year institutions were not in use in 1962, less than five per cent will be unused in 1965 and for the rest of the decade. Therefore, the degree of flexibility that is needed in any system of higher education will not be present unless the rise toward estimated capacity is offset by more efficient utilization of facilities.

PLANS TO MEET IN-STATE REGIONAL DEMAND FOR ENROLLMENT

Additional understanding of needs in New York State is to be obtained from a comparison of student residences and the places students go to obtain post-secondary education. Until the fall of 1963, specific information on the patterns of mobility demonstrated by students of New York State were lacking. Fortunately, it was possible to coordinate a study by the State Education Department of in-state migration with a study of interstate migration being conducted simultaneously by the Federal Office of Education.

The results of these inquiries raise many questions of educational importance. The data in Table 22 (Appendix G) show that New York has a total out-migration of 92,000 students, partially offset by an in-migration of about 56,000, thus leaving net out-migration of over 36,000 students. These facts raise questions concerning reasons why so large a number of the State's citizens seek educational opportunity outside of their home state, and whether changes in educational policies and practices are needed. Similar questions of educational policy and operations are raised by the migration of college students as summarized in Tables 23 and 24. These tables show the over-all pattern of migration by full-time undergraduate students and by first-time freshmen, respectively. Beyond this, still more detail is available by consulting Tables 25 and 26 which show, respectively, in- and out-migration by economic area within New York State, and finally the origin and destination of all interstate migration by full-time undergraduate students as of the fall of 1963. Some of the major conclusions which may be reached through a careful study of these data are:

(a) With few exceptions, private four-year institutions, contrary to the popular belief that they serve students from a wide geographic range, have among their student bodies a highly "local" population both in terms of interstate and intrastate migration patterns. Over 75 per cent of undergraduate students in New York institutions under private control are residents of the State. Of these, half are residents of the county in which the institution attended is located.

(b) The four-year units of City University serve New York City residents almost exclusively.

(c) The university centers and university colleges of State University draw virtually all of their students from New York State and tend to serve the State as a whole rather than the area more immediately surrounding a given campus.

(d) The contract colleges of State University serve a broader national and state population than do the other four-year units of State University.

(e) In both interstate and intrastate migration, private two-year institutions serve a population much less "local" than the public two-year colleges, and parallel closely the range of drawing power shown by the private four-year institutions.

(f) Public two-year institutions serve New York State residents almost exclusively, with the agricultural and technical colleges serving a statewide population and community colleges serving a much more localized area.

(g) The Nassau-Suffolk economic area is seen to have the State's most outstanding net migration figure, a minus 16,000. In other words, a net of 16,000 undergraduate students leave these two counties to attend college elsewhere in the State.

(h) New York City has the second largest out-migration, a total over 13,000, but this is offset by an even larger in-migration from the rest of the State.

(i) The Rockland-Westchester economic area has the second largest net out-migration, totaling in 1963 almost 6,000 students.

(j) Enrollment originating in New York City and the Nassau-Suffolk region supplies the second largest number of students to all economic areas except Buffalo, Mohawk Valley, and Rochester.

(k) A large proportion of the students from the Mohawk Valley economic region seek education outside this region. Very low in-migration and an out-migration of nearly 5,000 students places this region third high in terms of net out-migration.

These comparisons indicate regions of high and low disparity between enrollment originated and places available for undergraduate students. Lack of places in a given region makes it necessary for students to migrate out of State or to other areas of the State regardless of their interests or financial condition. For purposes of statewide planning, these comparisons quickly show the regions in which increased capacity is most or least needed.

Many persons will hold that a student's migration from home frequently stimulates his personal and social development. But the possible advantages must be assessed against the added expense of travel and the increased cost to both student and institution for provision of board, room, and related special services. This raises the question whether the additional costs should be borne entirely by the student or met in part by the institution.

The present pattern of intrastate student migration will change gradually as proposals to establish new colleges and expand the enrollment of existing colleges are brought to fruition. The Fulton-Montgomery Community College in the Mohawk Valley region and two community colleges in New York City were not in operation when the data above were reported. Several others were in their early years of operation and were still in the process of establishing themselves. As soon as the proposed new four-year institutions in Nassau and Westchester Counties are established by State University, the new institutions of baccalaureate level are founded by City University, and the proposed expansion of community colleges has been accomplished, a better balance between geographic place of residence and accessibility of places for study should appear. Future recommendations for new or expanded institutions or programs should be formulated in the light of the changes which actually occur.

The Regents:

(1) Set as the goal for 1970 a statewide enrollment of approximately **431,000** full-time undergraduate and graduate students. Within this figure the private colleges are expected to enroll **208,000;** State University and the public community colleges together, about **160,000;** and City University, approximately **63,000** students. (The figures for the two public universities were derived independently of those reported as target figures set forth in their 1964 Master Plans. The order of magnitude of the enrollments projected, however, agrees closely.)

(2) Recommend that all institutions which have not done so already make plans for more efficient utilization of facilities and faculties. High priority to such plans is essential to the achievement of statewide enrollment goals and to higher quality performance.

(3) Will prepare and publish annual revisions and extensions of projections of enrollment for all categories of students and types of institutions to assist future planning by State University, City University, and the private institutions.

(4) Recommend that State University of New York examine its policies on student admission and the provision of institutional facilities, especially dormitories, in the light of currently available data on geographic mobility of students. Announcement of a definite policy by State University is necessary for regional planning on the part of other colleges and universities.

ELIMINATING BARRIERS TO COLLEGE ATTENDANCE

To meet fully the higher educational needs of individuals, more is required than the provision of an aggregate number of student places on a statewide or regional basis. Other barriers to college attendance which must be broken include those of high cost, program inaccessibility, and excessively difficult transition from level to level in post high school education for the student who seeks to utilize the services of two or more institutions.

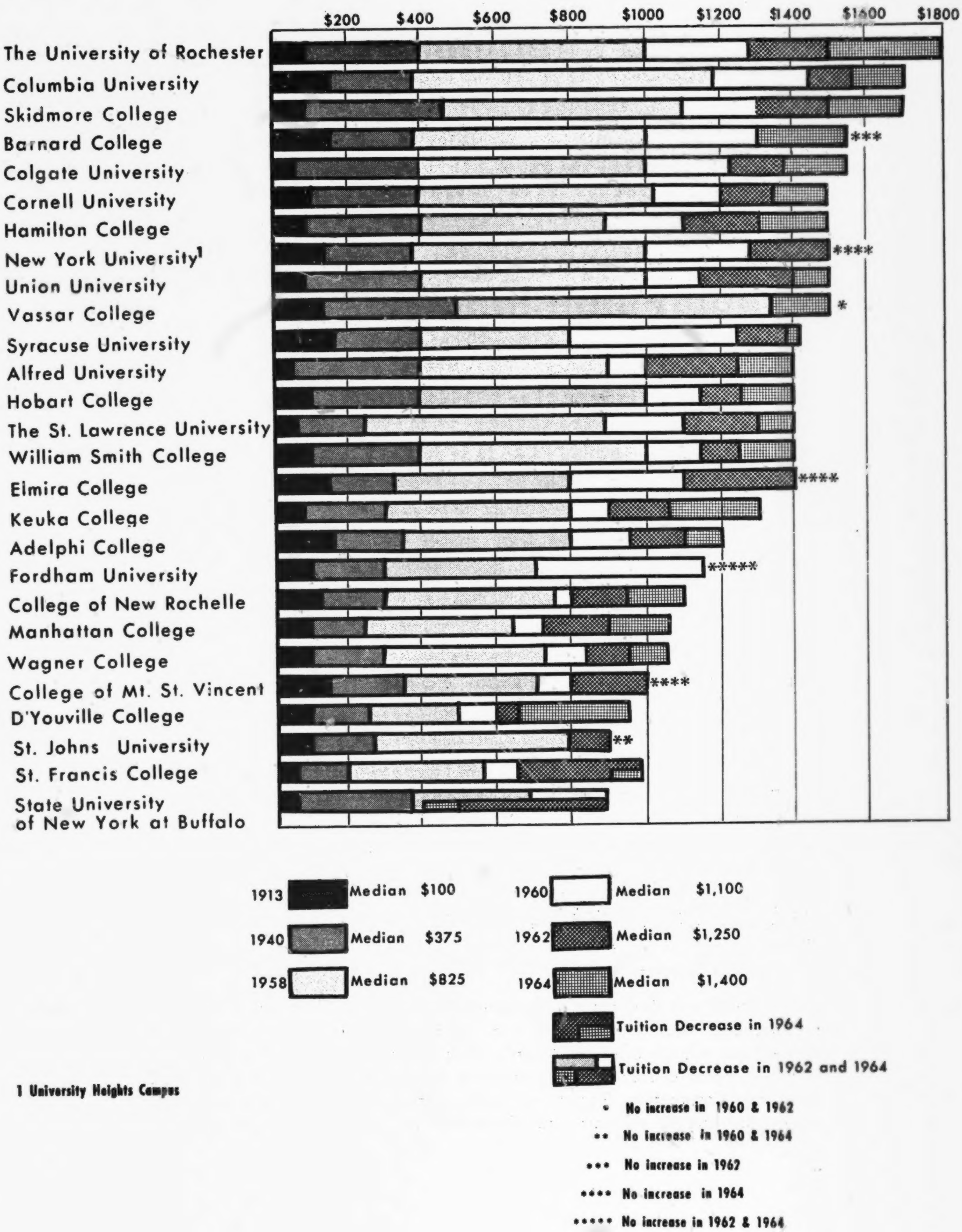
TABLE 5

Undergraduate Tuition of the Private, Four-Year, Nondenominational Collegiate Institutions in New York State, Liberal Arts Program*

Economic Area	1959-60	1962-63	1963-64	1964-65
Binghamton				
None				
Buffalo				
University of Buffalo	$ 780	No longer applicable		
Capital District				
Rensselaer Polytechnic Institute	1,300	$1,600	$1,600	$1,800
Russell Sage College	900	900	1,200	1,200
Skidmore College	1,100	1,500	1,500	1,700
Union University	1,050	1,400	1,400	1,500
Elmira				
Alfred University	961	1,236	1,300	1,400
Cornell University	1,200	1,340	1,400	1,500
Elmira College	1,100	1,400	1,400	1,400
Ithaca College	850	1,200	1,300	1,550
Mid-Hudson				
Bard College	1,680	1,780	1,780	1,930
Vassar College	1,325	1,325	1,500	1,500
New York				
Adelphi University	800	1,110	1,200	1,200
Columbia University				
Barnard College	1,080	1,320	1,550	1,550
Columbia College	1,100	1,575	1,710	1,710
Program in the Arts	1,100	1,300	1,500	1,500
Teachers College	1,184	1,280	1,350	1,350
Finch College	1,600	1,850	2,000	2,150
Hofstra University	930	1,085	1,200	1,200
Long Island University				
Brooklyn Center	800	1,120	1,350	1,450
C. W. Post College	864	1,120	1,200	1,280
New School for Social Research	960	1,120	1,120	1,200
New York Institute of Technology	648	900	900	900
New York University				
University Heights	1,120	1,440	1,440	1,500
Washington Square	1,120	1,440	1,440	1,500
Pace College	800	900	900	1,100
Pratt Institute	800	1,200	1,200	1,300
Sarah Lawrence College	1,820	2,020	2,020	2,200
Mohawk Valley				
Hamilton College	1,100	1,300	1,300	1,500
Utica College of Syracuse University	800	900	1,000	1,000
Northern				
(The) St. Lawrence University	1,100	1,300	1,400	1,400
Thomas S. Clarkson Memorial College of Technology	725	1,300	1,500	1,500
Rochester				
Rochester Institute of Technology	750	975	975	1,125
(The) University of Rochester	1,150	1,500	1,500	1,800
Syracuse				
Colgate University	1,225	1,375	1,550	1,550
Syracuse University	1,100	1,370	1,410	1,410
Wells College	1,275	1,450	1,450	1,650
Total Number of Institutions	36	35	35	34
Median Tuition	$1,100	$1,300	$1,400	$1,500

* Tuition for colleges that charge their tuition by dollars per credit hour is computed on the basis of thirty semester-hour year.

Figure 11
Tuition in Selected Liberal Arts Colleges
1913 - 1964



1 University Heights Campus

High cost is a major barrier to college attendance, and costs continue to rise. The median tuition charges of a selected group of liberal arts colleges in New York State rose from $1,000 in 1960 to $1,250 in 1962, and $1,400 in 1964. The data shown in Table 5 and Figure 11 indicate that tuition costs are rising about $100 a year for the State and for most of the regions.

College attendance is strongly correlated with financial ability to meet the costs incurred. In Table 6 it is shown that the median per capita income in those counties in which college attendance is highest is almost $450 higher than in those counties in which college attendance is lowest. The other comparison in this same table reflects economic considerations also, for another important element in the cost of attending college is the cost of living away from home. The counties with the highest college-going rate not only have a higher per capita income than the State as a whole, and a much higher income than counties with the lowest college-going rates, but also have more colleges within their boundaries, making higher education more accessible to their residents than to residents of counties with low college-going rates.

TABLE 6

College-Going Rates, Per Capita Personal Income,
And Number of Institutions in New York State Counties
With Highest and Lowest College-Going Rates, 1963

COLLEGE-GOING RATE	PER CAPITA PERSONAL INCOME	NUMBER OF INSTITUTIONS
	Highest ¼ of all counties in c-g rate [1]	
Range 59-73%	Range $1,435-3,648	Range 0-16
Median 64.5%	Median $2,255	Median 2.5 [2]
	State (all counties)	
Range 43-73%	Range $1,435-3,648	Range 0-59
Median 58%	Median $1,919	Median 1
	Lowest ¼ of all counties in c-g rate [1]	
Range 43-51%	Range $1,460-2,560	Range 0-14
Median 49%	Median $1,813	Median 0 [3]

[1] New York City included as one county. Highest ¼ covers 14 counties but the lowest ¼ includes 17 counties because of identical college-going rates at the upper limit of the group.

[2] 59 institutions in 14 counties.

[3] 27 institutions in 17 counties, of which 9 have no institutions and 5 have 1.

The 16 counties with no institutions have a median college-going rate of 51 per cent. The 20 counties with the greatest number of institutions (3 to 59) have a college-going rate of 58 per cent.

Students and their parents have been helped to carry the financial burden of postsecondary education through such programs as Regents Scholarships and Fellowships, Scholar Incentive Awards, State University Scholarships, low tuition in public higher education, and guaranteed loans through the Higher Education Assistance Corporation. Regrettably, these contributions by the taxpayer to the student financial aid programs are seldom included and frequently not even mentioned by persons outside of New York when they compile data on public expenditures for higher education by the various states. This assistance in 1964-65 amounted to over $62 million.

Inaccessibility as a result of geography has been touched upon above in connection with migration. Inaccessibility also results from the lack of suitable programs, suitable admission standards, and suitable counseling and placement. Elimination of the barriers to initial entry into college is only part of the job that needs to be accomplished if full opportunity in higher education is to be provided. Transfer procedures must be given special attention for those students wishing to transfer from two-year to four-year colleges without hindrance to their educational objectives. A special category of scholarships available to students who have demonstrated superior promise for college study while attending community or junior colleges would be both helpful and appropriate. Consideration should be given to the initiation of a program of Regents Junior Year Transfer Scholarships as enrollments rise in community colleges, and these institutions are given a more important place in the State's total program of higher education. Table 7 shows that at the present time public and private institutions are accepting about equal numbers of juniors as transfers. The significant point is that while public institutions report very little capacity to accommodate more transfer students, the privately controlled institutions indicate capability of handling more than twice as many as they actually received.

TABLE 7

Transfer-Admissions To Junior Class
Full-Time Day Programs, Fall, 1963

Planning Area	Number of Junior Transfers			Additional Places Available		
	Private	Public	Total	Private	Public	Total
Binghamton	18	41	59	30	0	30
Buffalo	110	218	328	336	0	336
Capital District	83	113	196	580	0	580
Elmira	119	31	150	116	50	166
Long Island	199	0	199	40	0	40
Mid-Hudson	36	72	108	135	0	135
Mohawk Valley	0	0	0	0	0	0
New York Metropolitan	672	783	1,455	1,545	0	1,545
Northern	25	25	50	115	0	115
Rochester	221	41	262	387	0	387
Rockland-Westchester	91	0	91	130	0	130
Syracuse	33	90	123	76	40	116
Total	1,607	1,414	3,021	3,490	90	3,580

INSTITUTIONAL PLANS

Ample evidence exists to show that on the whole the private colleges taken as a group are exerting strong efforts to keep the costs to the student as low as possible. As will be shown in Part VI in more detail, there has been no significant increase over the past five years in the proportion of current operating expenses financed by tuition and fees charged to students. In other words, private colleges and universities have been able to meet rising costs of operation during the recent past by acquiring increased funds from other sources (such as governmental grants, endowment, private foundations, annual alumni contributions, and gifts) proportionate to increases in direct charges to the student.

Plans reported by private colleges indicate every intention to continue this pattern of financing as long as possible and still maintain desirable levels of quality. Nonetheless, they recognize that the pattern of continuing rise in direct costs to the student (in dollar amounts, even if not in proportion to costs supported) requires critical examination. To assist students to meet costs of attendance, the colleges are continually expanding financial aid programs. These include more loans and scholarships, work opportunities for some students, and other related programs.

It is clear that State University recognizes the existence of barriers to education and the desirability of their removal. A policy of strengthening existing programs and devising new programs to aid talented but disadvantaged persons, to facilitate transfer of students among units, and to improve admissions, advisement, and placement is stressed in the Master Plan. These areas will become increasingly critical as social change proceeds and as State University plays an increasingly larger role in higher education in the State.

The City University Master Plan contemplates changes in the undergraduate "student-mix:" a higher proportion of juniors and seniors in the senior colleges, more transfers from community colleges, especially to the schools of general studies, and more part-time students in the evening divisions of community colleges. Thus, the plan implicitly assumes that the transfer process will not become the block to student progress which it often is in other situations.

The existing lack of agreement on tuition policy still results in unequal treatment for students attending different publicly supported institutions in the State. Steps to remove this unequal treatment were not proposed by City University in its 1964 Master Plan. The plan, in fact, extended to the five community colleges in New York City under the Board of Higher Education the policy of not charging tuition which is in effect in the regular four-year undergraduate programs. Tuition is charged, however, for graduate programs and in the schools of general studies. As stated in their **Major Legislative Proposals for 1964**, the Regents hold that if a modest tuition charge were to be made consistent with that set by State University, a desirable uniform pattern would prevail throughout all publicly supported higher education in the State. A contribution from the student in the form of tuition and fees is reasonable in the light of the benefits he obtains personally, and in view of the skyrocketing costs of higher education. In January, 1964, the Regents issued a statement to clarify some of the issues and to provide detailed information on their position. This has been brought up to date and is available upon request. The statement makes clear, for example, that if City University were to adopt a tuition and financial assistance program similar to that of State University there would be additional awards to all students from families in the lowest income brackets.[10] Therefore, the argument that such students would be handicapped financially would not be valid.

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[10] "Regents Statement on a Tuition Policy at the City University of New York." This may be obtained from the Office of Planning in Higher Education, State Education Department, Albany. See also **State University of New York Revised Policy on Tuition and Fees**, a report by the Board of Trustees, January 1963.

REGENTS COMMENT AND FURTHER PROPOSALS

The barriers to college admission and attendance must be reduced further if we are to reach full opportunity for higher education for the State's citizens. College-going still is influenced too much by the ability of the student to raise the money to meet costs of attendance and by geographic accessibility, rather than being based upon a choice of the program best suited to the individual's needs for personal and occupational advancement. Students choosing certain types of specialized post-high-school programs face a special barrier because such State aid as the Scholar Incentive Program is not available to them. This is true, for example, in the case of programs in hospital schools of nursing, business schools, and other single-purpose schools or institutes.

The program of Regents Scholarships is unparalled among the states in its impact on freedom of student choice in higher education. However, if the number of scholarships remains fixed while the size of the graduating classes increases from year to year, the State will be assisting a smaller percentage of the high school graduates to attend the college of their choice. In the future this will discriminate against some able students who will be members of larger graduating classes. The opportunity to win a scholarship should be based on ability and not on the size of the class in which the student happens to graduate. The State should return to the earlier practice of establishing the number of Regents Scholarships, not as an absolute number, but as a percentage of the graduating class of each year. Also, the amounts to be awarded require periodic adjustment in order to yield the same benefit as costs change.

Additional State efforts must be made to provide greater freedom of choice in higher education and to enroll a larger percentage of our "college potential" citizens. One consequence of the adoption of the recommendations of this Plan will be the gradual reduction of the gap between enrollment and college potential, as shown in Figure 5. If the private colleges, State University, and City University achieve the enrollment goals set in this Plan by 1970, there will remain a gap of from 49,000 to 181,000 between the number of students enrolled full time in colleges and universities (two-year and four-year) and the number of 18-21-year-olds in the population of the State at that time who would be capable of succeeding in college study. Whether a higher or lower figure is chosen to describe the gap depends on which of the two estimates (see pp. 12, 15) of college-going potential is chosen. In either event, the waste of human resources is sizable and deplorable. Every effort possible should be made to narrow this gap and to prevent the waste of human resources it implies.

This is especially true with respect to the talents and abilities of persons in the lower socio-economic classifications of populations and those who have limited cultural backgrounds. During the past few years the colleges and universities have understandably paid increasing attention to the problem of extending higher education to the culturally deprived. Notable among these efforts is the statement prepared by the special committee appointed jointly by the Association of Colleges and Universities of the State of New York and the State Education Department. This statement provides an excellent model for institutional self-appraisal and a sound basis for improving services to people who otherwise would be left out of the mainstream of higher education.

The Regents:

(5) Recommend that State University develop plans for expanding enrollment in community colleges by greatly increasing regular day work-study and other programs which make post-secondary education avail-

able to recent high school graduates and adults who would not otherwise be reached.

(6) Recommend that private four-year colleges and universities which have unfilled places for new students at junior-year level give full information to the community and junior colleges. Such information should include number of vacancies and the procedures for student transfer with minimum loss of time and energy.

(7) Recommend that consideration be given to the establishment of a program of "Regents Junior Year Transfer Scholarships" for community and junior college transfer students who demonstrate superior promise for continued college study while attending community colleges or privately controlled junior colleges.

(8) Recommend to City University and State University that in planning for new baccalaureate degree institutions, further consideration be given to the feasibility of the creation of upper-level colleges. These colleges start at the typical junior year and continue through the master's level in suitable academic fields.

(9) Recommend that the Legislature return to the principle of fixing the number of Regents College Scholarships to be awarded each year as a percentage of total high school graduates to avoid discriminating against the able students of the future who will be members of larger graduating classes.

(10) Will seek adjustments periodically in the amounts awarded under the Regents College Scholarship, the Scholar Incentive Program, and other assistance to students. This is necessary to keep student aid realistically related to the costs which students and parents must bear to elect programs and colleges of their choice.

(11) Recommend that State financial assistance, similar to that provided to college students through the Scholar Incentive Program, be granted to student nurses in registered nurse programs at hospital schools of nursing.

(12) Will direct the State Education Department to make a special study of the programs and costs carried by students entering other types of specialized post high school institutions (business schools, single-purpose technical schools, etc.) to determine whether the State should provide some form of financial assistance to students in such institutions.

(13) Recommend that State University and City University for institutions within their respective systems clarify and describe procedures to facilitate placement and transfer of students, and make this information available to all other interested institutions.

(14) Recommend that City University move rapidly to strengthen the faculties and programs of the schools of general studies (programs now for late afternoon and evening study), emphasizing their function of providing upper-division work for transfer students from community and junior colleges.

(15) Recommend that all higher educational institutions improve their services to the culturally deprived by using the plan for institutional self-evaluation and the guidelines as formulated by the College Committee on the Disadvantaged appointed jointly by the Association of Colleges and Universities of the State of New York and the Commissioner of Education.

2. TO MEET THE NEEDS OF THE ECONOMY AND OF THE SOCIETY FOR SPECIALIZED MANPOWER

A discussion of the needs of New York State for personnel with special training and talent was presented in Part II. These persons are necessary to staff business and industry; to fill the ranks of the professions, technological workers, and semiprofessionals; and to provide leaders for government and society at large.

Some answers to the question in Part II are considered in the following section by (1) examining the colleges' planned expansion in production of degrees to which specialized career fields are related, (2) examining plans for continuing education and other special services that bear on the production or maintenance of special skills and talents, and (3) looking at the special studies that leaders in colleges and universities are conducting and the discussions they are carrying on relevant to the institutions' role in meeting manpower needs.

As this Regents Plan goes to press, a wide variety of different agencies and organizations in New York State are also seeking answers to the manpower problem and giving special attention to strengthening the State's business, scientific, and technological enterprise. They include a number of special bodies established within recent years, such as the Science Advisory Council, the Advisory Council for the Advancement of Industrial Research and Development, the State Manpower Advisory Council, the Interdepartmental Committee on Manpower, and the New York State Science and Technology Foundation, as well as the longer established agencies such as the Departments of Commerce, Education, and Labor. All are concerned with the State's quest for personnel with specialized talent and training: a quest that in the final analysis leads to the colleges and universities and the offices of higher education of the State Education Department.

AN EARLY CONCLUSION: PRESENT RESEARCH AND PLANNING INADEQUATE

The flow of students through the "production line" of higher education in a democratic social order should not be controlled by factors other than the ability and the free choice of the students. Their choices are conditioned by many things such as the earnings attached to various career fields, the status given different fields by society, the effectiveness of guidance and information about career choices provided to the students, and less tangible influences within the culture in which the students live. Because of the variability of these factors, educators hesitate to make predictions concerning how many students will be graduated year by year in particular fields of specialization.

With respect to New York State, the plain fact is that the research and planning energies of colleges and universities have been too much taken up with other matters to allow an accurate appraisal of the flow of students to graduation in specialized fields. The Office of Planning in Higher Education directed a questionnaire to the colleges of the State asking for predictions to 1970 of the number of graduate degrees that would be granted in each of the major academic departments or divisions. Most colleges supplied information, but emphasized that such data were highly speculative. Two major private universities replied independently that such projections had not been attempted, but that the inquiry had stimulated interest toward doing so in the near future. Neither State University nor City University in their 1964 Master Plan report the production of graduates expected in the foreseeable future, even in terms of totals for the institutions reported.

SUMMARY OF CURRENT PLANS

Although the conclusion is correct that present research and planning are inadequate to provide clear and complete answers to questions of needed manpower and the role of the colleges in providing it, there is still a body of meaningful information on the subject that can be reported. To gather and summarize this information, it was necessary to go beyond the formal plans submitted by the private colleges and the 1964 Master Plans of State University and City University. By doing this a better current basis for interpreting the supply and demand of trained manpower was established. Furthermore, it is from this base of current information that steps toward improved and extended studies of manpower have to be projected.

INSTITUTIONAL PLANS

The great need in New York State for specialized manpower will place a heavy burden on all levels of higher educational preparation because, directly or indirectly, collegiate study for most students leads to a specialized career. The burden must be recognized, however, as most heavily placed on the graduate and professional programs in the colleges and universities. An examination of the role higher educational institutions play in producing specialized manpower, therefore, must consider both the undergraduate and graduate degrees they have granted and plan to grant.

Over the five-year period 1958-59 to 1962-63, the number of degrees granted by New York institutions increased at all levels. This is shown in Table 8. Of significance to statewide planning, moreover, is the fact that for the latest year shown in the table, the private colleges granted 97 per cent, or 1,554, of the total 1,608 doctoral degrees granted, and 75 per cent of the 12,559 master's degrees. It is essential to the State that these institutions continue and expand this service. But to meet the State's needs, the major expansions of graduate programs planned by both State University and City University are also necessary.

Despite the rapidly increasing enrollments in colleges and universities, all evidence points to a continued shortage of long duration in practically all career fields requiring specialization. The most complete analysis of demand, made by the State Department of Labor and entitled **Jobs—1960-70,** reports that in 1965 there will be 1,043,500 professional, technical, and semi-professional workers needed in the State and that by 1970 this figure will become 1,184,000, or 1.13 times the 1965 figure. Based on recent historical ratios of degrees produced to students enrolled in college, the Office of Planning estimates that in 1965 a total of 88,000 college degrees will be produced and that this figure will be 114,000 in 1970, or about 1.30 times the 1965 level. Since less than half the persons earning degrees in any year represent net additions to the work force, the increase is barely enough to keep pace with the increase in demand, to say nothing of handling needed replacements or correcting significantly for shortages that now exist.

Even if the expectations of over-all degree production are achieved, there is still the problem of getting students into particular specialized fields of study. Counseling and guidance have only a limited influence in encouraging student decisions to enroll in the fields leading to occupations most in demand.

This fact is of extreme importance in evaluating plans in selected areas. Engineering is a pertinent example. The private colleges and universities have reported plans to expand graduate and professional education in engineering up to 50 per cent between 1964 and 1970. However, in recent years undergraduate schools of engineering have reported unfilled places for students. Thus there is no evidence that the 187 per cent expansion estimated to be needed in first degrees in engineering in Table 2 will be met. If it is not, the failure will be not because of lack of programs but because of undersubscription of available programs by enough competent students.

TABLE 8

Degrees Granted By Level of Degree and Type of Institution
Institutions of Higher Education, New York State, 1958-59 and 1962-63

Type of Institution	Associate Degrees	4-Year Bachelor's and 1st Professional Degrees	Second Level	Doctorate	Total
4-Year or More					
Private					
1958-59	851	27,448	9,150	1,459	38,908
1962-63	1,108	30,280	9,434	1,554	42,376
Public—SUNY					
1958-59	—	3,995	953	13	4,961
1962-63	132	6,483	1,503	54	8,172
Public—CUNY					
1958-59	521	6,494	1,089	—	8,104
1962-63	517	7,717	1,622	—	9,856
Total					
1958-59	1,372	37,937	11,192	1,472	51,973
1962-63	1,757	44,480	12,559	1,608	60,404
2-Year					
Private					
1958-59	581	—	—	—	581
1962-63	1,055	—	—	—	1,055
Public					
1958-59	4,281	—	—	—	4,281
1962-63	7,251	—	—	—	7,251
Total Private					
1958-59	1,432	27,448	9,150	1,459	39,489
1962-63	2,163	30,280	9,434	1,554	43,431
Total Public					
1958-59	4,802	10,489	2,042	13	17,346
1962-63	7,900	14,200	3,125	54	25,279
State Total					
1958-59	6,234	37,937	11,192	1,472	56,835
1962-63	10,063	44,480	12,559	1,608	68,710

In fact, no evidence was found that the gap between estimated need and number of degrees in 1962 in any of the ten fields shown in Table 2 was due to a lack of programs or places available in programs except in the health sciences. Special attention is called to the need for optometry. This was not among the fields listed in Table 2 because this table considered only programs operating in the State. There has been no college program in optometry in New York since 1956. On the other hand, pharmacy, which was listed in Table 2, would not appear to be in need of new or expanded programs, since institutions reported unfilled places.

More complete and detailed evidence of the need for personnel in the health professions was provided in 1963 by a special Committee on Medical Education appointed jointly by the Governor and the Board of Regents. Its comprehensive report[11] gives data on the need for physicians, dentists, nurses, and for personnel to provide a variety of related health and social services. The Committee recommended that a new Medical Center be established at the State University of New York at Stony Brook by 1970 and a second new Medical Center be considered for Westchester County by 1980. The criteria for the establishment of new Medical Centers were set forth by this committee of specialists as follows:[11]

(1) The medical center should be an organic part of a complete and well-equipped university. Ideally, it should be located on the campus of the university and maintain continuous intercourse in all major academic areas.

(2) The medical center should be a complete Center, with the best possible educational programs for physicians and other health personnel, for graduate studies in the basic sciences, and for research in the sciences, education, and patient-care.

(3) The center should have complete facilities including (a) classrooms, attaching laboratories and student facilities, including housing; (b) offices and laboratories for the faculty and graduate students; (c) an adequate library; and (d) proper facilities for teaching and research in patient-care, as well as service.

(4) It should have access, for clinical teaching and research, to patients of all ages and conditions and of all social and economic classes in a teaching hospital which it controls. Any area in New York State which can support a strong university will have a sufficient number of patients. The availability of a university setting should override any claim that a large patient volume of an existing hospital should be the basic reason for the location of a medical center.

(5) The facilities should be designed so that the faculty and their programs of research, teaching, and patient-care will promote experimentation. Obviously, the clinical facilities should provide for more than the acute hospital patient. There should be provisions to accommodate the ambulatory, the chronically ill, the psychiatric, and persons of all age groups—infants, children, adults, and the aged. They should be adapted to such concepts as "progressive" patient-care (separate areas of the hospital for patients with varying degrees of illness); the "half-way house" for the mentally ill (a day or night hospital for outpatients); a child study center for emotionally disturbed children, and a full range of rehabilitation facilities for the emotionally and physically handicapped.

State University is moving to implement these recommendations by proposing in its Master Plan, 1964:

(a) that a new medical center be established on Long Island as part of the State University at Stony Brook; and

(b) that studies be continued to determine the proper location for an additional medical center to be established during the 1970's.

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[11] **Education for the Health Professions,** A Comprehensive Plan for Comprehensive Care to Meet New York's Needs in an Age of Change, June 1963. A report to the Governor and the Board of Regents from the New York State Committee on Medical Education, Malcolm Muir, Chairman. pp. 13-14.

The Regents strongly endorse these proposals.

Two other steps toward reaching the Committee's objective of increasing the number of qualified practitioners were taken by the Regents early in 1964. One of these was the adoption of new policies to serve as guidelines to the State Education Department in recommending the admission of foreign medical graduates to the state licensing examination. Physicians trained abroad can now demonstrate competence through a program of proficiency examinations coupled with varying amounts of approved hospital training and supplementary education. The other step was the amendment to the Education Law which now makes it possible for the Board of Regents to endorse acceptable medical licenses from other states on the basis of two years of successful practice instead of five.

In nursing, the Associate Degree Nursing Project jointly undertaken by Teachers College of Columbia University, State University, and the Education Department has helped establish a pilot group of twelve new nursing education programs in community colleges throughout the State and has set a pattern for a substantial increase in educational facilities for nursing.[12] This project is an excellent illustration of what can be accomplished through statewide cooperation. Staff and facilities were contributed by public and private universities, community colleges, and public and private hospitals. The project was supported by a grant from a private foundation and continued with funds from the State, the communities, and student tuition.

The Special Committee on Medical Education has recommended the expansion of programs in the health service technologies to prepare ancillary personnel for medical and dental fields. To help carry out the Committee's recommendation for study and action programs for the preparation of these personnel, a five-year project, the Community College Health Careers Project, was launched in 1964. The project is based on development of the vast potential of the community colleges for alleviating serious statewide shortages of health service technicians.

Thus it appears that with the exception of the health sciences, the colleges and universities are providing sufficient programs for the trained manpower needed by the economy. The problem is not primarily one of providing more new and expanded programs of higher education, for on this score progress seems assured. The difficulty is identifying and attracting qualified students to programs of education for those occupations which are critical, of retaining them through first and higher degrees, and of bringing them back for further education when necessary or desirable. Devising a method of solving these problems has been plaguing many minds but remains elusive.

Graduate and Professional Programs.—An indication of the way higher educational institutions will assist in meeting the expanding needs for persons with specialized training is found in their plans to expand graduate and professional programs. Such plans are reported by each of the major components of higher education.

Seven private institutions plan to offer new doctoral programs by 1968. Three of these are located in New York City, two on Long Island, and two are upstate. The planned expansion of capacity for full-time students is expected to be about as follows: 20 per cent in engineering, 20 per cent in physics, 10 per cent in each of the fields of mathematics, biology, speech and hearing, and medicine, and under 10 per cent in French, literature, sociology, and the combined areas of business and history.

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[12] **Final Report to the W. K. Kellogg Foundation.** New York, The Associate Degree Nursing Project, Robert E. Kinsinger, Director, July 1, 1964.

A total of sixteen privately controlled higher educational institutions plan to offer new master's degree programs by 1968. They are distributed geographically as follows: Buffalo Area, two; Capital District Area, two; Long Island Area, two; New York City, eight; Northern Area, one; and Rochester Area, one. By fields of study, 45 per cent of the capacity for full-time students in the planned new growth of master's programs is in engineering, about 20 per cent in education, 20 per cent in business, slightly under 10 per cent in religion, and the balance in seven different fields.

As already stated, the colleges and universities were able to provide only fragmentary information about the expansion of enrollments expected in specialized fields of study. The information that was reported indicates, however, that an expansion of about 50 per cent can be expected in graduate engineering programs, over 30 per cent in graduate professional education, and over 50 per cent in graduate fields in the arts and sciences.

A number of specific proposals advanced by State University are relevant to the State's needs for specialized manpower. Examples are the proposals to establish a new School of Social Work at Albany and to explore feasibility of establishing a graduate school of library science. City University in its plan also provides relevant proposals, for example, new doctoral programs in eight fields of study.

Programs to Prepare Technical and Semi-Professional Workers.—Although a variety of sources of supply for trained technicians and semi-professional personnel is found in New York State, the colleges, especially two-year institutions, are expected increasingly to provide many of these workers. The Regents have taken the position that training technicians and semi-professional personnel is one of the chief responsibilities of the comprehensive community college, although not to the exclusion of other types of colleges and schools.

There are many reasons to support the view that the comprehensive community colleges play the major role in meeting the needs for highly trained technicians. One of them is that these types of programs do not flourish in the setting of four-year institutions. In 1963-64 only twenty, or about one out of eight private four-year institutions offered associate degree programs. There are only four private baccalaureate degree-granting institutions which plan to offer new associate degree programs by 1968. One is in New York City, one on Long Island, one in the Mid-Hudson Area, and one in the Capital District. These colleges report plans to establish two new associate degree programs in nursing, one in basic studies, and one in general education.

Neither does it appear that the private two-year colleges intend to play a significant role in preparing middle occupation workers. The figures shown in the tabulation on page 59 indicate that of the 32 private two-year colleges operating in the State in 1963-64, only 10 were offering occupational programs, and these provided a total of only 53 curriculums. This information indicates little ability on the part of the private two-year colleges in the near future to train technicians and semi-professional personnel.

Seven private colleges now classified as two-year institutions report intent to establish new associate degree offerings. Three are in the Buffalo Area and one each in New York City, Capital District, Mid-Hudson, and Rockland-Westchester Areas.

In contrast to the picture of technician and semi-professional education among the private institutions, developments in the public two-year institutions are significant. A total of 103 separate curriculums for public community colleges has been approved by the State University Board of Trustees and the State Education Department since July 1, 1962. Of these, 86 have been in occupational fields and

Curriculums Offered by Private
2-Year Colleges, *1963-64

Classification of College	Number of Colleges	Number Colleges Offering		Number of Curriculums Offered		
		Pre-Professional Programs	Occupational Programs	Total	Pre-Prof.	Occup.
Church-related						
Religious only	17	17	—	17	17	—
Lay students also	6	6	2	12	6	6
Total	23	23	2	29	23	6
Non-church related	9	7	8	55	8	47
Total	32	30	10	84	31	53

*** Includes Briarcliff which in 1964 was authorized to change to 4-year status.**

17 in the general arts and sciences preparatory to further study. It is recognized that training for particular occupations calls for more specialized courses than are required in pre-professional education, but even so the data indicate that the community colleges are making commendable efforts to establish training programs for workers in the middle occupations. However, the Education Law as now written does not permit community colleges to offer two kinds of service in regular day programs, which would be desirable. At present their regular day programs may not offer curriculums of less than two years' duration, nor serve students who have not graduated from high school.

More needs to be done than simply to provide curriculums to produce enough technical and semi-professional manpower. This is evident from the declining proportions of students enrolled in occupational as opposed to pre-professional curriculums in the public two-year colleges in recent years, dropping from 95 per cent of the total enrollment in 1953-54, to 87 per cent in 1958-59, to 75 per cent in 1960, and to 69 per cent in 1964. Better counseling and guidance of students and improved public appreciation of the need and value of occupational studies at the post high school level are necessary.

The increased emphasis on occupational programs stressed by the Regents cannot be provided without a larger supply of qualified instructors. Yet nowhere in the State is there a large-scale program geared to provide instructors needed in growing numbers to teach post high school technical and semi-professional courses.

Continuing and Adult Education Programs.—Programs for continuing and adult education often have been regarded as a way of using spare time and otherwise idle facilities. They must now advance to a position equal with other academic services if the obligation to keep managerial, professional, and semi-professional workers abreast of developing knowledge is to be fulfilled, and, just as important, if people are to be better prepared for lives in which leisure is increasing.

Information gathered indicates that the private colleges in general intend to serve persons in need of continuing education after formal attendance at school or college has ended. In so doing, these institutions demonstrate intent to continue an educational service for which they have long been counted on in New York State. From the data in Table 9 one can observe that in the year 1961-62 it was the privately controlled colleges that showed the heaviest enrollments of students in programs classified as "extension, special media courses, and adult education."

TABLE 9
Enrollment in Extension, Special Media
Courses and Adult Education, 1961-62

Classification of Institution	Resident Degree Credit		Nondegree Credit		
	Extension	Courses by Mail, TV, Radio	Adult Education	Courses by Mail	Short Courses
4-Year					
Private*	3,207	121	20,711	7	738
Public					
SUNY**	3,286	0	261	0	0
CUNY	0	0	10,858	0	40
Total Public	3,286	0	11,119	0	40
Total 4-Year	6,493	121	31,830	7	778
2-Year					
Private	8	8	161	15,000	0
Public	0	0	9,342	0	258
Total 2-Year	8	8	9,503	15,000	258
STATE TOTAL	6,501	129	41,333	15,007	1,036

* Includes enrollment of SUNY contract colleges (Agriculture, Home Economics, School of Industrial & Labor Relations, and Veterinary College) at Cornell; Cornell reports a total enrollment of 287 in resident extension, including the contract colleges.

** Includes enrollment for College of Ceramics at Alfred, the contract colleges listed above, and former University of Buffalo (now SUNY at Buffalo).

Derived from statistics in Table 16 of OE-54032, Circular No. 743, **Comprehensive Report on Enrollment in Higher Education,** U. S. Dept. of Health, Education, & Welfare.

However, quantitative data on the extent that private colleges will continue to offer these programs are difficult to gather and compile. Institutions are reluctant to estimate their reach and commit themselves to such programs. This is true even though the institutions which would attract most of such students express a willingness to serve needs beyond their immediate campuses and present constituencies if they had the resources.

State University has proposed "that programs of continuing education be expanded, placing particular emphasis upon the retraining of displaced workers, providing refresher courses for professional workers, and meeting the cultural needs of our citizens."

City University has proposed to give special consideration to professionals seeking updating of competence, to public officials desiring special training, and to others who do not seek a degree but need and are capable of serious graduate study. It also has proposed to undertake two more specific responsibilities. The first is planning, in collaboration with other New York City universities, to accommodate members of foreign families brought to New York City by the United Nations and other international centers. The second is the expansion of existing urban research into an Urban Studies Institute to support basic research in a number of fields on which the solution of serious problems in the Metropolitan Area will depend. Both proposals have merit for meeting needs outside the usual programs of undergraduate, graduate, and professional training.

Interest Within Higher Education.—The role to be played by higher educational institutions in meeting the needs of the economy and society for specialized personnel is increasingly a matter of study and discussion among persons in positions of responsibility in colleges and universities. At the annual meeting of the Association of Colleges and Universities of the State of New York held in October, 1964, a session was devoted to this topic. A major conference on the continuing training of specialized manpower sponsored jointly by the Advisory Council for Advancement of Research and Development and Columbia University was held at the University during the fall of 1963 and another similar conference took place at the University of Rochester a year later. The public community colleges of the State provided staff and related assistance to the study of employment in technical occupations in New York State undertaken cooperatively by the State Department of Labor and the State Education Department.

REGENTS COMMENTS AND FURTHER PROPOSALS

The planned efforts of all of the colleges and universities of the State to expand their production of personnel with specialized talent and training are in the right direction and in general should be supported. An important reservation is that some plans reported and some requests for registration of new graduate programs do not show sufficient established strength in supporting undergraduate programs nor do they present plans for the building of such a foundation. A second reservation has to do with the proposals of City University and State University to create or expand highly specialized schools relatively independent of all other university components. The creation of a specialized school outside of a more comprehensive instructional program endangers the level and quality of education achieved in the specialized school and the efficient use of faculty and facilities of comprehensive institutions.

More efforts than those recorded to date are needed. As already indicated, there are fields in which highly trained manpower is or will be in short supply which are not adequately accounted for among the plans for program and enrollment expansion in any of the constituent sectors of New York State higher education. Serious shortages exist and are expected to continue for the foreseeable future in rehabilitation and social work, college teaching, the health professions, engineering and scientific fields, and most technical and semi-professional occupations.

Graduate Education.—The most prevalent way to expand the supply of persons with specialized talent and incidentally to strengthen graduate programs in colleges and universities is to provide fellowships to graduate students. Among State programs of this type, New York's is one of the best. However, the level of stipends provided has not kept pace with competing national graduate fellowship programs such as those of the National Science Foundation, the National Defense Education Act, the Woodrow Wilson Fellowships, and others. The State's graduate fellowship programs will not attract and retain able scholars unless the stipends are raised and adjusted regularly for changing economic and educational conditions.

Another method of alleviating critical manpower shortages would utilize contractual agreements between the Board of Regents and institutions with resources and programs to help meet the State's needs. (See also pages 67, 78 and Rec. 63.) Short term contracts with public or private institutions for development of the initial phases of programs of education and training of persons for professions and trades in which there is a critical shortage should not be confused with the "contract college" arrangements now in effect nor with the contractual arrangements recommended by the New York State Committee on Medical Education. The Regents believe that the idea of temporary contracts merits immediate trial implementation, especially where it can be shown that the contract agreement provides for the purchase of services to the State, thereby bringing existing resources to bear on the

State's needs. In some cases, results could be achieved more quickly and economically this way than by other means.

Longrun contractual arrangements, such as proposed by the New York State Committee on Medical Education, remain of considerable interest for use in certain specialized cases. Although other illustrations of the possible use of continuing contractual agreements are at hand, the best and most promising one for implementation in the near future would be in the field of the medical profession. In addition to a new medical school on Long Island, State University has proposed that a study be started now to plan for a second medical school. The costs of a new medical school, including a teaching hospital, are enormous. The necessary staff must come from a national pool of medical educators who are already in short supply. It takes a long time to construct the facilities and to assemble a qualified staff. The needs through the years may show clearly that a second additional medical school should be constructed by State University, but the production of the number of physicians that a new medical school would eventually turn out, could be achieved much more rapidly and less expensively through the coordination and assistance of existing medical schools in the State. A proposal to do something along these lines has already been formulated by the deans of the privately controlled medical schools and should be fully evaluated by all groups concerned with medical education.

Up-to-date university programs in graduate and professional instruction and research require expensive and highly developed techniques and specialized equipment. Even well-developed graduate schools are finding increasing difficulty acquiring and maintaining adequate resources of such equipment because of the rapidity of changes in knowledge and methods of research and the high costs involved. One particular resource for which all of these observations are true and which would greatly strengthen graduate instruction in the State, thereby assisting also in the improved production of specialized manpower, is that related to computer equipment of unusually large capacity. Such a facility would lead to expanded and strengthened graduate instruction and research. It would also serve as a pilot demonstration for similar projects among groups of graduate and professional schools.

Discussions have occurred involving college and university presidents, graduate deans, and other administrators on the urgent need by scientists and research faculty for access to large computers. They have suggested the possibility of organizing interinstitutional cooperative computer centers in the State. A feasibility study should be made. The large number of colleges and universities in the New York Metropolitan Area, with graduate and research programs and their geographical proximity, suggest that any study of such a facility should be conducted in that area. Still other recommendations and proposals to strengthen graduate education are mentioned elsewhere in this plan, including the following: the establishment of regional research and reference libraries; the establishment by the Legislature of a program of Regents professorships and a proposal by the Regents of a similar program of distinguished visiting professorships, the several proposals directed toward mitigating the impending shortage of new college teachers; the establishment of an Office of Science and Technology within the State Education Department to assist institutions; and, most important of all, the proposals for new and expanded graduate programs by City University, State University, and the private universities.

A few institutions have made plans for expansion of graduate education in the years ahead. The Regents strongly encourage each university which hopes to play a significant role in doctoral education to develop a ten-year plan of action. For its part, the Board of Regents will direct the State Education Department to provide all possible information and assistance so that the result will be a coordinated statewide plan looking at least ten years ahead.

Technical and Semi-Professional Education.—With regard to the State's requirements for technicians and semi-professional workers, there is need for a clarification of the role to be played by private institutions. The fact is that even those private two-year colleges which wish to serve broad constituencies tend to emphasize the liberal arts and sciences rather than occupational curriculums. In the first place, many privately controlled two-year colleges have a very strong orientation toward the programs of traditional four-year liberal arts colleges and would not choose to alter it. Factors working against more widespread development of occupational programs in private two-year colleges include the high costs of operating technical and semi-professional curriculums, the difficulty of acquiring qualified faculty to head occupational programs, the greater concentration on college preparatory courses found in the high schools with which many private two-year colleges are operationally affiliated, the character of the guidance programs in these high schools, and often a conviction that a basic liberal arts education should be given priority. The accomplishments of private two-year colleges in such fields as nursing, secretarial training, and some other business fields are ample evidence that they can develop successful programs and sizable enrollments in occupational fields if they can acquire reasonable means to overcome the first two obstacles. The developing programs of federal financial assistance may be significant in changing the ability and interest of these colleges with regard to occupational programs.

Unless the private colleges develop more occupational programs, the breadth of choices available to students who wish to study in private institutions will continue to be unduly restricted. As a result, more students than would actually wish to do so may turn to public colleges, especially the community colleges. The consequences of such a turn on a large scale are important for long-range planning by both public and private institutions. If private enterprise does not voluntarily assume some responsibility for an important educational service, then public effort must take full responsibility.

There is need, also, to clarify the relative roles of college and secondary schools in training technicians and semi-professional workers. Occupational education does not lend itself easily to a conventional separation of responsibilities between these two levels. The people to be served seek a wide range of skills and knowledge and differ widely in age and in prior education. To accommodate these diverse demands requires careful planning and the closest educational articulation between levels.

Steps toward the development and implementation of an expanded vocational education program in schools controlled by local boards of education are under way in New York State. Articulation of this program with postsecondary institutions calls for the full utilization, in each community where they are available, of the community colleges and the agricultural and technical colleges to provide an expanded range of occupational curriculums for adults and youths beyond high school age. It calls, also, for the officials of these institutions to play an active role from the beginning in planning for new occupational programs in the community and in the continuous coordination of such programs.

Despite the Regents' strong support of the community colleges and their recognition of the significance of comprehensive programs in these institutions, they question the soundness of proposals to extend partial programs to sparsely settled areas of the State. The sparse population in no way diminishes the importance of the need to the persons involved but makes complicated the devising of economical and academically desirable solutions. The proposals for Saranac Lake and Plattsburgh pose serious educational issues, as does the timing of future expansion in the areas listed. Further study of these particular local problem areas may produce better solutions. Specifically, the Regents have reservations about State University's proposal for Saranac Lake because it is unlikely that enough students will be enrolled in the foreseeable future to justify the offering of a full community college program at generally acceptable costs of operation. To give less than a complete program to the students who do enroll by limiting, for example, library resources or guidance assistance, would not be a good service to them. Moreover, with regard to the proposed nursing program, the area is clearly lacking in necessary clinical facilities. The Regents recognize the concerns that exist about the depressed economy of this region, but feel that this should not override sound educational planning. Therefore, the Trustees are urged to consider other alternatives to the proposal now advanced. One would be a program of grants-in-aid to enable students to go elsewhere to college.

With regard to the proposal for offering limited two-year occupational programs at Plattsburgh, the Regents have reservations because these programs would be placed within the administrative and academic framework of a four-year general purpose State college. The evidence from within and outside of New York State is strong that two-year occupational programs do not fare well in such a framework. Again, educational principles are at stake. As in Saranac Lake, the Regents would favor a program to subsidize the relatively few students who wish occupational training to go elsewhere to get it.

In this connection, the Regents emphasize their endorsement of the State University proposal that a program which cannot be supported in a community by enrollment of commuting students but which could be supported in one or more locations by residential students, will normally be established in an agricultural and technical college in preference to a community college. The Regents believe that this policy can be extended to over-all statewide planning with beneficial results. The Regents believe this policy should be consistently followed in the statewide planning of higher education. It keeps clear the administrative, educational, and operational differences between community colleges and agricultural and technical colleges. The present Saranac Lake and Plattsburgh proposals do not fit within this general policy.

Continuing and Adult Education.—There is now and will be increasingly in the years ahead a strong demand for expansion of "out-of-class" instruction at the higher education level. Such instruction, provided by extension classes, short courses, correspondence study, educational television, and other means besides resident instruction, is needed by many persons. It will help engineers, physicians, teachers, and others in professions which are affected by rapid changes in technical knowledge to keep up to date. It will help workers displaced by new industrial and business techniques to acquire new skills and understandings to change to other jobs. It will help the citizenry at large to attain a higher level of general education and to be effective members of an increasingly complex society. That the colleges and universities of the State are sensitive to these needs and willing to expand their services in continuing and adult education is also quite clear.

A general problem of wasteful duplication, however, exists whenever a number of institutions or networks of institutions are engaged in off-campus educational services. Steps should be taken early to forestall development of this problem in New York State.

The Regents:

(16) Recommend that all institutions of higher education which are expanding to help meet the State's manpower needs, build on already estab-

lished strengths or pay special attention to the foundations laid before new programs of expansion are undertaken.

(17) Recommend that leadership in the private two-year colleges seek to develop a greater balance between transfer and occupational curriculums. This should be undertaken especially by those colleges which serve constituencies that in interest and talent are representative of the general population.

(18) Recommend that community and junior colleges expand their counseling and guidance services, with particular emphasis on occupational selection and training.

(19) Recommend that the private colleges seeking to expand occupational programs review carefully the opportunities that currently exist for Federal financial assistance for programs to develop technicians and semi-professional workers.

(20) Will direct the State Education Department to study the special costs faced by high school graduates who enter post high school occupational programs and to determine the feasibility and desirability of helping students to defray the costs.

(21) Will appoint a special committee representing the four major sectors of higher education in the State to prepare a plan for increasing the supply of trained community and junior college instructors in occupational fields.

(22) Will direct the State Education Department, in cooperation with State University, to give attention to the needs for in-service training of community and junior college instructors in occupational fields. These instructors should be helped to engage in organized periods of study to improve their effectiveness as college teachers. Persons with strong backgrounds of experience in technical and semi-professional work but with limited academic training should be aided in overcoming this deficiency.

(23) Will continue to encourage an articulated and coordinated development of both area vocational programs under local public school auspices and community college programs leading directly to employment as technicians and semi-professional workers. The State should continue to make full use of all available resources for preparing technicians and semi-professional workers, and such complete utilization should emphasize coordinated planning and development at both local and State levels.

(24) Recommend that the Education Law be amended to permit public two-year colleges to offer programs of less than two years' duration as regular day offerings when these programs meet the needs of persons who have graduated from high school or are beyond the usual age of high school attendance.

(25) Will direct the State Education Department, in cooperation with State and City Universities and the Association of Colleges and Universities of the State of New York, to review present practices of all institutions offering extension services and to develop a statewide plan to expand, coordinate, and make effective use of extension programs.

(26) Will continue to review periodically the number of graduate fellowships authorized in New York State and the level of stipends provided for these fellowships to determine improvements made necessary by changing economic and educational conditions.

(27) Recommend that the Trustees of State University and the Board of Higher Education of City University give special attention to steps which

would integrate specialized institutions with those which are more comprehensive in scope. Special purpose colleges both at undergraduate and graduate levels which do not have clear operating relationships within general purpose centers of instruction and research should be discouraged.

(28) Will request the Legislature to authorize funds for a feasibility study of the establishment of a cooperative computer facility beyond the resources of any one institution to acquire, this facility to be used to strengthen graduate education and research.

3. TO STRENGTHEN INSTITUTIONS

The State's institutions of higher education, both public and private, must be greatly strengthened to meet the demand of the future. It will not be enough for them to maintain themselves at the level of the past. They must not only be larger and better than in the past, but they will be expected to respond effectively to a whole new world of unlimited dimensions. While this is strikingly illustrated by scientific and technological developments such as atomic fission and space flight, there are also dramatic changes in the arts, social studies, and humanities to which the college must respond. Considering the size, variety and nature of the tasks ahead, there is need to strengthen further even our most distinguished colleges.

FACULTY

The single greatest threat to the quality of college instruction is the impending severe shortage of able and well-prepared faculty members.[13] In the competition that will develop, colleges will have to maintain the best possible conditions to attract and hold good faculty members, improve salary schedules, and develop various types of in-service opportunities.

All possible actions to offset the impending critical shortage should be taken by all concerned: administrators and faculty of institutions of higher education, Federal and State agencies, and business and industrial leaders.

The Master Plans of both State University and City University contain a number of proposals and recommendations looking toward the strengthening of their faculties. The Regents warmly endorse these and urge all persons and agencies involved to give the proposals the highest possible priority. The budget requests of State University and City University for these purposes must be considered minimal.

From time to time the Department has held special conferences on the improvement of college teaching, and several of these devoted part of the program to a discussion of the shortages that everyone agreed would inevitably develop. The Regents College Teaching Fellowship Program, started in 1958, was one practical step taken in anticipation of the State's needs for more and better teachers. Not much else has developed as a statewide program.

At present the view ahead is discouraging insofar as actually strengthening all college faculties is concerned. It is doubtful that the colleges and universities will be able to hold the present level of faculty preparation even though strenuous efforts are made.[14] To create the best possible situation it will be necessary to make special efforts to identify and encourage prospective college teachers, change some of our procedures and practices in the programs leading to doctoral degrees, develop various programs jointly with business, industry, and government, and establish salary levels that compare favorably with off-campus offers even though not equal.

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[13] John Gardner, "Flight from Teaching," 1963-64 Annual Report, Carnegie Foundation for the Advancement of Teaching.

[14] Estimates of the additional teachers needed in higher education by 1969-70 vary from 35,700 to 50,000. According to an estimate in the Federal Office of Education, the number of doctor's degrees awarded in that year will be 18,300, with about 11,000 going into higher education.

To help the universities bring to the State additional faculty members of great distinction, the 1964 Legislature established a program of Regents Professorships in Science and in the Humanities. Eventually chairs in ten universities will be supported by means of Regents contracts with outstanding scholars selected by the universities and by contracts with the institutions concerned to supply proper facilities, supplies, professional assistants, and such other services as may be necessary. The legislative act called for annual appropriations, up to $100,000 for each chair. By assisting universities to attract and hold additional scholars of unusual distinction the State hopes to stimulate the development of centers of excellence.

A parallel program of guest professorships primarily for undergraduate colleges is proposed by the Regents in order to sustain and enhance an atmosphere of intellectual vigor throughout higher education. Such a program over a period of years would enable a large number of college faculties to invite distinguished teacher-scholars to join them for short periods of time. Experience with such programs elsewhere has shown that both faculty and students benefit greatly. Since the graduate centers depend in large part on the undergraduate colleges for the identification, encouragement, and preparation of prospective graduate students, a program of Regents Guest Professorships would be a logical extension of the present program of Regents University Professorships.

The Department, in collaboration with all of the colleges and universities of the State, should again give special attention to matters related to the supply and demand for college faculty.

The Regents:

(29) Will direct the State Education Department staff in Higher Education to give special attention during the coming year to the impending shortage of new college teachers and to encourage and assist appropriate groups in taking steps to offset this emergency, including the following:

Consult with the Council on Graduate Education and the Advisory Council on Higher Education on ways in which the time lapse between the bachelor's degree and doctorate may be shortened; take all possible steps to implement any feasible plan that can be developed.

Review and report to the Regents on the desirability and feasibility of the suggestion that a new degree be created short of the Ph.D. but involving a well-conceived new program of research and study.

Consider ways in which retired professors could be encouraged and assisted to continue to serve.

Give special attention to the recent report of the Governor's Committee on the Education and Employment of Women and seek the Committee's further advice and assistance in respect to college instruction.

Organize a coordinated effort by colleges and interested civic groups to activate in each major region of the State a "college faculty resources registry"—a directory listing of qualified personnel interested in part-time employment as college teachers.

(30) Will explore with college administrators and representative faculty members possible ways to identify prospective college teachers early in their undergraduate programs and to encourage them in reaching their objectives.

(31) Recommend the establishment by the Legislature and Governor in 1965 and subsequent years of legislative support for a program of distinguished visiting professors at undergraduate colleges.

(32) Recommend that groups of colleges and universities that have close geographic and other ties develop interinstitutional cooperative programs and joint use of resources, human and material, to further the scope of their services to students and to the State.

FACILITIES, BUDGETS, ORGANIZATION—PUBLIC HIGHER EDUCATION

The proposals in the Master Plans of the two public universities include a number of goals and recommendations to greatly strengthen their facilities. These can be found in the summaries given in Part IV. Almost all of the proposals are strongly endorsed by the Regents. Both institutions aim for distinction and increased service to the State; but they cannot attain the goals set forth in their Master Plans unless they are freed from unnecessary procedural restraints, and unless the necessary funds are put at their disposal.

Information on the budget requests for 1965-66 has been received and discussed by the Regents. The Regents consider these requests to be a realistic estimate of the level of support that these two universities require.

With respect to City University, controversial questions should not be allowed to hold up funds needed, either for operations or capital development. City University should be provided the level of support from City and State sources indicated in its budget proposals; particularly the sums needed to expand the graduate programs proposed by the University by 1968. During the next year there should be developed an equitable over-all formula for determining State appropriations for City University purposes, including graduate education, and this formula should be advanced as an amendment to City University's Master Plan as soon as possible.

Although critically important, this matter of budget and an appropriate formula for State support is only one strand in a complex network of relationships involving the State and City University which has grown through the years without design or order. A confusing array of relationships and understandings, many of them informal, has resulted. They involve the Board of Higher Education and City University's Chancellor, the Mayor, the Board of Estimate, State University, the Regents, the Governor, and legislative leaders. A clarification and simplification of State-City relationships with respect to City University is urgently needed.

Also, a number of special problems exist with regard to the community colleges throughout the State. These institutions are legally identified under both State and local governments. Their legal structure was described briefly on page 6. They are clearly intended to provide opportunities for persons who need post high school education and who live within daily commuting distance of the community college. The Regents policy on these institutions is presented in Appendix F.

Although based on sound and accepted principles of balanced local control with statewide supervision and coordination, the State's community college law needs improvement on several key points. One of these is the relationship that should prevail between the local sponsoring body (which by law provides one-third of operating and one-half of capital funds) and the community college board of trustees. The evidence is quite clear that at present the structure allows the sponsor, through the budget approval process, to make or heavily influence educational decisions which ought to be fully controlled by the trustees. This problem is compounded in areas where more than one community college is found and the sponsorship is by more than one agency.

Another matter currently working in some cases at cross purposes with the original legal intent in founding community colleges relates to the "charge back." This is a charge imposed automatically on counties for attendance by their residents as students in community colleges maintained elsewhere. Conceived originally to enable students to get community college instruction when none was available in their home area, it now has two basic weaknesses which have become apparent with the widespread development of new community colleges. It forces a locality which maintains a community college both to support its programs and to pay for some resident students' attendance elsewhere. Many such students enroll in the same programs offered by the community college close to their homes. Current "charge back" procedure also enables some localities which do not now have a community college, but could afford one and also have adequate population to justify one, to exploit services provided by community colleges maintained by other localities. This exploitation is made more acute by the fact that there is no "charge back" provision at all for capital development costs.

In order to move more rapidly and in an orderly manner toward the goals for public higher education, the Regents believe that a number of steps should be taken.

The Regents:

(33) Will continue to support any additional legislative action needed to give State University the autonomy of administrative operation typical of the strongest state universities in the country.

(34) Recommend that the Education Law be amended to abolish the provision authorizing establishment of a four-year community college.

(35) Recommend that the Education Law be amended to provide that after a local sponsoring agency acts to establish the first community college in a given geographic area, the same agency must also be the sponsor of all later community college developments in that area.

(36) Recommend that the Education Law be amended to clarify the realms of administrative jurisdiction and responsibility of the local sponsoring agency and the local boards of trustees of community colleges so that only the latter controls institutional operations such as the development of the budget, qualifications of staff, and specifications of physical plant equipment as well as matters of program development and instruction.

(37) Recommend that the Education Law be amended to provide that, when a student leaves his home area where a community college exists, to attend one located elsewhere and enrolls in a program offered by the community college in his home area, no "charge back" to the area of residence should be levied. Provide further that exception to this general rule can be made for individual students if approved by the board of trustees of the community college in the student's area of residence.

(38) Recommend that the Education Law be amended to establish another "charge back" to apply to costs incurred by a local supporting area for capital development and purchase of major equipment, with provisions similar to those relating to operating expenses.

(39) Recommend that the Board of Trustees of State University give further study to advantages and disadvantages of dormitories at community colleges.

(40) Recommend that State University be given encouragement and support in strengthening its program of institutional research and factfinding to improve both its own understanding and to aid in public interpretation of such matters as characteristics of the student body, faculty supply

and demand, and fiscal needs for current operations and capital outlay.

(41) Will direct the State Education Department in cooperation with City University to study the merits of amending the Education Law to remove the identification of City University with the New York City public schools.

(42) Have requested the Commissioner of Education, in consultation with the President of State University and the Chancellor of City University, to recommend a course of action for clarifying the State's relationship to City University for the consideration of all interested parties as soon as possible.

(43) Recommend that consideration be given to amending the Education Law to authorize State appropriations for current operations to City University to be made on a current rather than a reimbursement basis.

(44) Recommend that the Education Law be amended to give a continuing statutory basis to the present legislative practice of providing from State appropriations payments to New York City to assist it to meet costs of physical facilities for higher education.

(45) Recommend that consideration be given to amending the Education Law to authorize payments from State monies to City University for use in paying half the cost of **construction** of physical facilities as opposed to half the cost of **debt service** for higher educational capital development, as is now the case.

(46) Recommend that consideration be given to making payments for construction costs to the Board of Higher Education rather than to the Board of Estimate of the City of New York so that the University can participate more fully and flexibly in the programs of the State Dormitory Authority and the Higher Education Facilities Act of 1963.

(47) Recommend that there be developed an equitable over-all formula for determining the State appropriation to City University, including graduate education, and that this formula be advanced as an amendment to City University's Master Plan as soon as possible.

NEW APPROACHES TO TEACHING AND LEARNING

The pressures of overwhelming numbers of persons seeking education beyond the high school, shortages in personnel and staff, increased requests for assistance from business, industry, government, and society in general will require that institutions of higher education use new approaches and devices, some of which will be strange and distasteful to both faculty and administration. But these must be explored fully. A number of institutions in the State have been doing so for many years. Others have more recently started their pioneering efforts. The pace generally has stepped up and yet one would have to say that the over-all picture is pretty much "business as before." This is due not only to a sincere preference to continue long established procedures which have brought quality and variety to American higher education, but also to a distrust of extravagant and enthusiastic claims sometimes made on behalf of television, programmed learning, and other "devices."

The task ahead is to involve able teachers of subject matter fields in working with new media and in developing the testing programs which will give them evidence that the changes introduced to stimulate and assist the student to learn have produced students as competent as those exposed to the traditional approaches. Unless the community of scholars and teachers that constitute a college faculty is so convinced, few real changes bearing directly on classroom instruction will be made.

The ones that are made, moreover, will not be as productive intellectually as they should be because they will not be guided and supervised by the ablest members of the faculty. Experts in communication have a most critical role here. They have the best understanding of many of the techniques that could bring about dramatic advances. But in the last analysis, they can only advise and assist the instructor.

A further task is to encourage able faculty, and periodically to help them through reasonable grants of time and money, to redevelop and rearrange the materials in their courses, in order more clearly to define their essential role as teachers. The teacher is indispensable in handling certain sections of most formal courses of instruction. The materials in other sections, however, can be handled by the student himself with a high degree of independence if the necessary guidance and source materials are provided. This viewpoint is neither new nor profound. Many demonstrations at the college level have shown that the time and effort of the best teachers can be used more economically and just as effectively if the student is expected to assume a greater responsibility for his own education. The procedures are not new but some of the devices and techniques are.

Regents planning on a statewide basis for the introduction of such devices is not new either. For more than ten years the Regents have urged the development of noncommercial educational television in New York State. In 1952 they proposed the first major statewide ETV system in the country, which envisioned the activation of ten UHF channels located throughout the State. A bill appropriating funds for implementing the plan was approved by the Legislature in 1953 but vetoed by the Governor.

In the intervening years the Regents have continued to press for funds to encourage and support development of ETV. In the meantime, with modest State help, several nonprofit groups, schools, and colleges have successfully launched educational television in several parts of the State. Special credit is due the nine educational television councils whose valued efforts have been a major factor in keeping educational television alive.

In 1962, a new statewide plan was proposed by the Regents based on the recommendations of the Starlin Report.[15] Early this year, at the request of the Governor, the President of State University outlined a ten-year plan which, when coordinated with aspects of the statewide plan envisioned in the Starlin Report, the on-going efforts of the regional Educational Television Councils, and those of other colleges and universities, would provide the State with excellent educational television facilities. Within the University, the proposed network would serve a multitude of important educational purposes and would bring informational, cultural, and educational programs into schools and homes throughout the State. The Regents strongly support this development.

Innovation will be necessary not only in the classroom, but throughout the management and organization of the institution as a whole. To accommodate the increased enrollment some institutions have already changed the academic year to use the summers more fully and the instructional day from early in the morning to late at night. Savings in plant operation are usually not as high as might be expected, yet there is some economy in operation per student and a very great saving in capital costs if the only other alternative is to build another building or even a campus.

The State has a deep vested interest in all these possible changes: in the first place, because of the greater educational opportunities that would accrue to its citizens as a whole; and secondly, because costs could be reduced.

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[15] Glenn Starlin, **Television and Higher Education,** A Plan for Statewide Development in New York. The State Education Department, Albany, 1962.

The Regents:

(48) Recommend that all New York colleges and universities promote the practice of granting advanced credit in those fields for which proficiency examinations have been passed, regardless of whether the competence of the student was developed through formal instruction or through independent study.

(49) Will expand the number of fields of studies for which State Education Department proficiency examinations are available as rapidly as possible, with priority given to such courses as anthropology, business, professional education, and statistics.

(50) Recommend that institutions serving large enrollments or offering complex, advanced programs, plan as rapidly as possible to develop on-campus educational television facilities (closed circuit or 2500 megacycle transmission).

(51) Recommend that individual institutions (public and private) consider the development of a "college communications center" and programs of training of faculty in the use of all parts of such a center. These centers facilitate a coordinated and complete use of educational communications materials and equipment, such as radio, television, programmed instruction, library resources, and computer-related instructional aids.

(52) Will continue to cooperate with State University, other colleges and universities, and the educational television councils in bringing to realization a truly statewide educational television network.

(53) Recommend that all colleges and universities, private and public, which have not yet done so, intensify their studies, experimentations, and actions to establish year-round operations, and in doing so examine not only the mechanics involved but also ways to provide a full range of programs throughout the year.

LIBRARIES

Libraries, more than most other areas of public service, require full and complete planning to include every level of library use. The cost of libraries, the rapidity with which library materials are being produced, and the need to prevent wasteful duplication should discourage institutions of higher education, both public and private, from trying to develop their own independent and complete library services. Cooperative effort in such functions as planning and purchasing is the key to the ultimate solution for library development. Since libraries are a critical part of successful higher education, planning for library services should be given a high priority.

Mounting enrollments in undergraduate institutions of higher education, plus a strong emphasis on independent study and wide reading, have brought into sharp focus the inability of most college and university libraries fully to meet the demands. Lacking a cooperative structure for planning acquisitions, referring unmet requests, and providing bibliographical information, college libraries are hard pressed to supply the general services that are needed. At the same time, all types of libraries, academic, special, and public, are now involved in the problems of library service at the reference and research level. Specialists and all research workers are faced with a growth of knowledge and a concomitant expansion of the printed word. This makes it increasingly difficult for scholars to be familiar with the mountainous volume of reference and research materials coming from today's new discoveries on every front. Solutions involving all types of libraries must be found because adequate library service is vital to the growth and development of business, industrial, and academic research.

The need for improved reference and research library service in New York State was brought to public attention in 1960 when the Commissioner of Education appointed a committee to study the problems of library service of an advanced nature. After successfully developing a network of 22 basic public library systems, the task of providing a capstone to this structure was undertaken. In 1961, the **Report of the Commissioner's Committee on Reference and Research Library Resources** was issued. This report stressed two concepts: the need for a total coordinated program which includes all types of libraries, and the need for a flexible plan capable of meeting the changing needs and a changing technology.

The Board of Regents have included in their legislative program for 1965 a bill to aid in the development of reference and research library resources.

The proposed act would:

1. Establish an advisory State Reference and Research Library Resources Board to consist of nine members, appointed by the Regents.
2. Provide for the establishment of regional reference and research library systems upon the request of the boards of trustees of educational institutions providing reference and research library service and upon the approval of the Commissioner of Education.
3. Provide State aid to the regional reference and research library systems.
4. Appropriate a sum to the Education Department to be utilized for the development of a statewide program of reference and research library resources.

Regional and State-level programs would be developed to insure that all the residents of the State can identify, locate, and gain access to the reference and research library materials they need.

The Regents:

(54) Recommend establishing a statewide system of regional reference and research libraries along the line described in the Regents special committee report of 1961; this should be set in motion by a pilot project for which the Regents have requested funds from the Governor and Legislature for 1965-66.

MUSEUMS

Museums provide educational opportunities that supplement the schools in their programs of regular and adult education. A survey of 179 museums in New York State in 1961 recorded over two million student visits, equal to half the public school enrollment. A million school visits occurred in New York City alone. General attendance is now over twenty million.

The public does not generally recognize, however, that museums of the State are also integral parts of higher education. Their collections are essential to the transmission of our cultural heritage. They preserve, conserve, and interpret these materials for a wide range of publics. Museums must maintain staffs of specialists who can organize material into orderly systems so that these collections can be studied and interpreted. Museums, therefore, are reference centers for the training of specialists in systematic biology, paleontology, and in those subject areas of anthropology, history, and fine arts, for which collections are essential research resources.

For years graduate students in neighboring universities have received training under museum faculties. A variety of opportunities for undergraduate study has also been provided. In these and other respects museums have played an important role in higher education. That the museums in New York State do in fact contribute significantly to education at the highest level is evidenced by the answers to a letter of inquiry on this matter. Museums located throughout the State report that they cooperate with university graduate schools in training students in such fields as anthropology, art, botany, history, geology, paleontology, and zoology.

The museum resources within New York State are superb. Lack of funds, however, is seriously limiting the availability of these resources. The demands for educational services of museums are increasing at a more rapid rate than the funds for their support. This was made clear in a report to the Regents two years ago by a committee of distinguished museum authorities.[16] The committee strongly urged that the State give supplementary financial support to strengthen and expand the educational use of museums. The Regents agree that any comprehensive plan for higher education should include State aid to museums in order that they may not only maintain their present research and teaching resources, but also develop them more fully.

The Regents:

(55) Recommend that institutions of higher education increase their use of the resources available in the museums of the State by establishing additional cooperative relationships for research and undergraduate instruction. Joint use of facilities and highly specialized staff in such areas as anthropology, history, and fine arts is urged, along with the development of more formally organized opportunities for students to earn college credit through individual study and proficiency examinations.

(56) Have drafted a statewide plan for expanding and strengthening museum services and urge that legislation implementing this plan and providing budgetary support for it be enacted.

4. TO IMPROVE STATE SERVICES TO THE COLLEGES

State services to the colleges and universities have been provided in the past by the State Education Department, the Dormitory Authority, and the Higher Education Assistance Corporation. The programs of the last two are described in their annual reports. Their excellent contributions are recognized elsewhere in this statement and no changes are proposed.

The services of the State Education Department will be considered briefly in the following paragraphs because the trend shown in recent years indicates the probable future development of such services to the campuses of the State.

As might be expected in the light of the State's growing activity in higher education and the increase in size and number of colleges and universities, the State Education Department staff directly concerned has been expanded. Relatively little of this expansion, however, has occurred in the Office of Higher Education. This unit is responsible for handling the increase in such legally mandated matters as charters and approval of curriculums. Since these duties are heavier than before and as important as ever, the Office's staff should be augmented.

Three new offices serving higher education have been established in the State Education Department since 1961. Each of them is manned by a small staff which can concentrate full time on special services to the colleges throughout the State. These offices focus their attention exclusively on areas in which there is a critical situation due either to a shortage of personnel or to the size of the tasks ahead. The Office of Foreign Area Studies, giving special attention to the non-Western civilizations, is an example of the former; the Office of Administrative Services illustrates the latter. Both offices have provided a wide range of services for colleges and universities and have stimulated cooperative programs in every region of the State.

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[16] **Report of the Commissioner's Committee on Museum Resources 1962.** The University of The State of New York, The State Education Department, New York State Museum and Science Service, Albany.

The third recent addition is the Office of Planning in Higher Education. This was established originally to assist the Regents and Department to develop the Regents Plan. Since the Regents' responsibility for planning is on a continuing basis, a number of studies and special projects are contemplated between the release of the 1964 Plan and that to be reported in 1968. A tentative list of these is included as Appendix H. Among these is one of particular importance for future planning. It is a proposed study of fiscal procedures used by private and public colleges and universities. The need for better data on finances became clear as material was prepared for Part VI of this plan. This Part provides a brief summary of financial information and estimates of costs expected to 1970.

With the Governor's appointment of the Board of Regents as the Commission for the Higher Education Facilities Act (1963), the Office was expanded with Federal funds to provide the necessary additional staff to develop and implement the State Plan which this Act requires. This is, no doubt, just a beginning of State services to the colleges in regard to Federal programs. The greater involvement of the Federal Government in higher education is a certainty. In planning ahead every effort will be made to simplify the relation of the college to the Department by keeping all of the State and Federal planning efforts concentrated in this one Office.

Looking to the future, it is obvious that the Department will have to do no less than in the past in the area of regulation and supervision to guarantee minimum standards. The colleges can expect that even the Office directly responsible for these fundamental operations will be developing also along the lines of the three new offices, namely, to stress additional service rather than regulatory supervision. Concentration will be on curriculum and instruction, including teacher education.

In fact, such new projects are already under way in the Office of Higher Education. For example, the Proficiency Examination Project, offering the possibility of college credits and of teacher certification credits on the basis of competency examinations, involves the cooperation of over 140 colleges of the State and presently enlists the services of 75 faculty members from 33 colleges and universities. An example of another cooperative project is a joint undertaking by five colleges and the Department to explore thoroughly the various recommendations recently made by James B. Conant for the improvement of teacher preparation in his report, **Education of American Teachers.**

The Office of Professional Education has been recently staffed to give more attention to education for the professions. Heretofore, it has been occupied almost exclusively with heavy responsibilities for developing and administering examinations for licensure and for enforcing the Education Law pertaining to the professions. Joint projects and planning conferences involving the various Boards of Examiners, the professional societies, and the professional colleges will be held to attack a variety of pressing problems in education for the professions.

The next specialized office to serve all the colleges of the State should be established in the field of science, engineering, and technology. This has been postponed up to this time because the Federal Government, through such programs as those of the National Science Foundation and the Federal Office of Education, has been giving special attention to programs at the college and university level. The State's funds have been used to complement these by supporting in-service education programs at the high school and elementary level. But the need for a special Office of Science and Technology in higher education is now pressing.

During the current year a number of institutions, organizations, committees, and State agencies have become deeply involved and concerned about various aspects of science education and research in the State. Among these are every university and most of the colleges in the State, the State Advisory Council on Higher Education, the Advisory Council for the Advancement of Industrial Research and Development, the New York State Science and Technology Foundation, the Science Advisory Council, the Office of Space and Atomic Development, and laboratories and research divisions of business and industry.

All of these groups could be assisted in their efforts by the Department, as experience with the other recently established specialized offices has shown. Without this there will be duplication of effort and needless expenditure of funds not only by these and similar groups but also by the colleges in responding to inquiries for certain basic data on resources, projects, programs, and so forth.

A number of offices in the Department not under the Associate Commissioner for Higher Education serve the colleges and universities. Among these are the Office of Research and Evaluation and the Regents Examination and Scholarship Center. These offices have been indispensable in providing data necessary to long-range, statewide planning. In this connection, it should be pointed out that more complete information is needed on academic aptitudes and career interests of high school graduates, viewed as a total population from year to year and viewed as populations in particular regions of the State. At the present time approximately 65 per cent of all the high school graduates of the State take the Regents Scholarship Examination. This is the nearest thing in New York State to a statewide test of academic aptitude. Many other states have found it wise to establish statewide programs of testing and surveying abilities, backgrounds, and interests of high school graduates as a foundation for planning for higher education.

The Regents:

(57) Recommend that each private college and university develop by 1968 a "perpetual inventory" type of long-range plan, looking ahead at least five years for program and fiscal development.

(58) Will direct the State Education Department to seek to develop better per-student cost figures on which to base cost estimates and comparisons through a study of fiscal procedures employed. The study should be undertaken in cooperation with the Board of Trustees of State University, the Board of Higher Education of the City of New York, and the privately controlled colleges and universities.

(59) Will establish in the State Education Department at an early date an Office of Science and Technology.

(60) Will establish a periodic survey of college-going aspirations and other related characteristics of high school seniors, using fully the Regents Scholarships Examination which already reaches annually approximately 65 per cent of the high school graduates in the State.

5. TO GUIDE AND ENCOURAGE THE DEVELOPMENT OF NEW PROGRAMS AND INSTITUTIONS

In developing new programs and new institutions in an orderly, well-planned manner, the academic community faces a paradox. The independence and sovereignty of each institution as a unit are necessary and should be fostered; the common interests and general strength of all the colleges and universities as a group or "federation of colleges" are also essential and to be furthered. Both of these desirable conditions can be preserved by adopting attitudes and taking action favorable to interinstitutional cooperation. A wise balance of regulation and control on the one hand, and stimulus and encouragement on the other, is required.

REGULATION AND CONTROL

The colleges and universities comprising the higher educational component of The University of The State of New York operate with a high degree of independence under the Education Law, Regents Rules, and Commissioner's Regulations. Most of the legal sections that apply to colleges are concerned with maintaining minimum standards or with establishing policies for the State as a whole which will encourage the general improvement of programs and administration. The State Education Department, which applies these standards and policies, has regularly sought guidance and endorsement of its procedures through extensive involvement of college and university representatives on advisory councils and committees. The resulting guidelines are followed when recommendations are made to the Regents on provisional charters, on absolute charters, and when registering (approving) new curriculums leading to degrees. Furthermore, the reactions of other institutions in the area in which the petitioning college is located are sought. Leaders throughout the State are consulted whenever special problems appear.

These procedures have been informal and without reference to long-range planning. This approach was adequate in the past when changes in the system were small, gradual, and relatively infrequent. More deliberate and formal procedures are now needed.

The situation has changed drastically in recent years. Higher education must be greatly expanded throughout the State, and the law provides that this be done according to long-range statewide planning. Without such planning, costly duplication of program and effort will occur and needless conflicts will develop. But planning is impossible unless there is improved communication and coordination prior to commitments for the launching of new curriculums, the expansion of new programs, and the establishment of new colleges, branches, or extension centers by public or private institutions.

The State Advisory Council on Higher Education agrees with the Department that for the years ahead it will be increasingly important to keep all institutions well informed of the plans developed by any one of them, and that more formal procedures will be needed in the Department for handling petitions for changes. These procedures should be developed with the assistance of all sectors of higher education in the State to guarantee the strong support of the academic community. Changes in the Education Law may be needed, but they should be considered only if the colleges and universities are agreed that they are necessary.

Among the elements that should be considered for inclusion in a more formal plan for the approval of new programs and institutions would be: (a) a request from the college concerned, with a rationale for the new venture, including its own appraisal of the local and statewide situation if these are pertinent; (b) a review and report by the Office of Planning in Higher Education on the relationship of the proposed action to the current Regents Plan; (c) a preliminary decision by the Office of Higher Education after conferences with the institution and other colleges most directly concerned; (d) a review of the preliminary decision by a group representative of the public and private colleges throughout the State for advice and reaction; (e) a final decision or recommendation by the Office of Higher Education; and (f) an opportunity to appeal the Department's decision directly to the Regents. With a mechanism of this sort, fully understood and strongly supported by the boards of control and the chief executive officers of the institutions of higher education, needless duplication of facilities and efforts could be avoided, and decisions could be reached on all matters of critical importance to statewide planning. Care would have to be exercised not to create a complex and involved procedure that would greatly slow down implementation of an institution's plans for development.

With regard to incorporation or chartering of new colleges, a change in the Education Law is needed. At present, a proposed corporation need meet only a minimum financial requirement of $500,000 that was set in the law in 1892. A more realistic requirement, in view of current economic factors, would be at least twice the amount stipulated in the statute. The present amount of $500,000 would suffice for junior colleges.

STIMULUS AND ASSISTANCE

The procedures suggested above will have constructive aspects, but the implementation of long-range plans requires a more positive approach. Long-range planning can be more effective if it does not depend entirely on proposals originating with the institutions. Ways must be found to encourage and assist colleges and universities to launch or expand programs to meet critical needs of the State.

One way to do this would be through contractual arrangements with a college, private or public, which would agree to develop certain programs as a service to the State, provided that financial assistance could be given immediately and through the formative years. (See also pages 61 and 67.) If the Board of Regents, as a focal center for planning in the State, had funds available for such purposes they could move rapidly to supplement the plans submitted by individual institutions in the areas of greatest State need.

Assurance of financial help would enable institutions to expedite development of new and expanded programs as a service to the State. Sharper focus and more consistent direction would thus be given to long-range planning—a focus and direction which are essential if planning is to be effective and genuinely statewide. As the board responsible for statewide planning involving both private and public institutions, the Regents are in a position to determine the areas of greatest need and to apply supplementary funds where they would be most productive.

The Regents:

(61) Will direct the Education Department to develop a plan in consultation with chief executive officers of colleges and universities representative of The University of The State of New York, to provide guidelines and more formal procedures for the establishment under either public or private auspices of new curriculums, new institutions of higher education, new college branches, or extension centers. These guidelines and procedures should guarantee the widespread discussion and review of proposed new developments by the academic community in New York State before formal action is taken by the Regents or the Department.

(62) Recommend that the conditions of incorporation of a college, now requiring at least $500,000, be changed to $1,000,000; except that the former figure will remain for incorporation of new junior colleges.

(63) Recommend that the Legislature appropriate the sum of $500,000 annually to be used by the Board of Regents to contract with colleges, public or private, for the development of the initial phases of programs in areas of critical State need, the contracts to be made for a period not to exceed five years, and to require a contribution of specific institutional resources.

Part VI

THE COSTS OF HIGHER EDUCATION

Higher education will require an increased flow of resources if the colleges and universities are to accomplish the tasks which have been set forth in preceding parts. Of this there can be no doubt. More faculty and staff must be recruited and retained in the face of a nationwide scarcity. More land, buildings, and equipment must be acquired. Both operating and capital expenditures, therefore, must rise substantially during the foreseeable future.

1. EXPENDITURES

Two facts stand out when attention is directed to the pattern of current expenditures in higher education in recent years as shown in Table 10. The first of these is the rise in total expenditures from 1957-58 to 1961-62 of approximately 60 per cent. During this same period, enrollment of all types increased about 22 per cent. Thus, the expenditures for providing higher education increased about eight per cent per year, aside from the increases attributable to larger enrollments.

The second fact which stands out is the consistency with which the educational dollar is divided among the several types of expenditures, regardless of the type of four-year institution being examined. In 1961-62 the expenditures for resident instruction and research varied only between 66 and 68 per cent of the total, and the same small variations are shown in each of the other categories.

PER-STUDENT EXPENDITURES

It would be highly desirable to be able to report educational costs per student for different types of institutions, for different types of programs, for different levels of study, and for different types of instructional techniques. Unfortunately, only the first of these is at all possible. Table 11 indicates the approximate medians and interquartile ranges of per-student costs for different categories of institutions.

The median figures show that annual institutional expenditures per student for educational and general purposes range from $1,360 for the 31 largest private institutions to $835 for community colleges. Expenditures at both State University and City University four-year units are approximately $1,200 per student per year. Agricultural and technical colleges reflect the expenses of their technical programs by a slightly higher figure than the community colleges.

OPERATING COST PROJECTION

Estimating the levels of operating expenditure for higher education that will be needed by the end of the decade presents a most challenging problem. It is clear from the record of the past, however, that the rate of increase in expenses for operations can be expected to accelerate at least as fast as the rate of increase in enrollment. More probably, for the reasons discussed below, costs will rise even more rapidly than enrollment, as has been true in the past five years.

TABLE 10

Purposes of College and University Current Expenditures, New York State Institutions, 1957-58 and 1961-62

Purpose	Classification of Institution and Percentage Distribution of Total Expenditures			
	Private[1]	CUNY	SUNY[2]	Community Colleges
Resident Instruction & Research				
1957-58	62	74	65	61
1961-62	66	67	68	60
General Administration				
1957-58	22	11	16	20
1961-62	20	19	18	25
Plant Operation & Management				
1957-58	11	11	13	13
1961-62	10	11	12	11
Libraries				
1957-58	3	4	3	2
1961-62	3	4	3	3
Extension				
1957-58	2	1	2	4
1961-62	2	*	*	2
Total Expenditures				
1957-58				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$303.7	$ 37.4	$ 37.0	$ 7.6
1961-62				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$490.4	$ 53.9	$ 57.6	$ 18.1
Percentage Increase—1957-1961	61	44	56	138

* Less than ½ of 1 per cent.

[1] Including contract colleges at Cornell University.

[2] Excluding contract colleges at Cornell University.

TABLE 11

Educational & General Purpose Expenses Per Full-Time Equivalent Student, New York State Institutions, 1961-62

Classification of Institutions	Median	Interquartile Range*
Four-Year Institutions		
Private (31 largest institutions)	$1,360	$ 978-2,255
State University of New York** Universities and Colleges	1,180	1,087-1,315
City University of New York**	1,200	1,135-1,270*
Two-year Institutions		
Private	1,400	1,093-2,792
Agricultural & Technical Colleges	910	846-1,436*
Community Colleges	835	698-1,006

* The interquartile range, which is the range of the middle one-half of the distribution, is presented to show the most typical range. However, the absolute range is shown for City University of New York and the Agricultural and Technical colleges because they include only four and six institutions, respectively.

** In 1962 City University of New York units were essentially institutions of baccalaureate degree level; State University units were of a similar level but included several higher cost special purpose institutions and some general purpose units just getting underway.

Faculty and administrative personnel are scarce relative to the demand for their services, and will become more scarce in the immediate future. Although faculty salaries rose 5.8 per cent nationally between 1961-62 and 1962-63, according to reports by the American Association of University Professors, this rate of increase is lower than the 7.4 per cent required to double salaries in a decade, as recommended by the Association. The goal of doubling salaries is supported by arguments both of equity and of necessity. Faculty salaries should be comparable to those of other professions. Moreover, substantial increases are essential if a sufficient number of able faculty and staff are to be recruited and retained in a market characterized by increasing mobility and by competition with employment opportunities outside the academic profession.

Other operating expenses will probably not be pushed upward in the near future at the same rate as salaries. However, price increases in the general economy would affect the goods and services used in education, and the high level of demand may make these increases particularly common in higher education. If the rate of increase of the past five years, 8 per cent a year, were to continue to 1970-71, the result would be a doubling of the expenditure for instruction per student from 1961-62 to 1970-71. It may be reasonable to assume that part of this will be offset by increased efficiency, with the result that the cost of instruction per student may be approximately 50 per cent higher in 1968-69, and two-thirds higher in 1970-71, than in 1961-62. Of course, a still greater rise in efficiency will reduce the per-student cost.

Thus, it is estimated that statewide institutional operating expenses for educational and general purposes, other than separately budgeted research, will rise from approximately $550 million in 1961-62 for approximately 447,000 full- and part-time students, to more than $860 million in 1968-69, and to $1 billion in 1970 for approximately 800,000 full- and part-time students. Table 12 shows the approximate cost estimated for different categories of institutions. Failure of support for any one category will place an increased burden on the others and, in fact, may require disproportionately larger outlays for unplanned responsibilities which must be assumed under emergency conditions or in response to unexpected failures.

TABLE 12

Estimated Educational and General Expenditures, New York State Institutions, 1968-69 and 1970-71*

Classification of Institutions	Estimated Expenditure (millions) 1968-69	1970-71
Four-Year or more		
Private (including contract colleges)	$451.0	$ 524.0
Public		
CUNY	148.0	188.0
SUNY (excluding contract colleges)	137.0	172.0
Two-Year		
Private	13.0	18.5
Public		
Agricultural and Technical Colleges	15.0	18.5
Community Colleges		
New York City	35.0	43.0
Other	63.0	86.0
	$862.0	$1,050.0

* This table is based on estimates of increases in enrollment and in cost per student as described in the text. No change is assumed in the present ratio of part-time to full-time students or in their distribution among institutions.

It must be emphasized that these expense estimates do not include all outlays which colleges and universities may make, but are limited to educational and general expenses. Major exclusions are expenditures for separately budgeted research and for dormitory and food service operations. Furthermore, there has been no attempt to include any extra expense due to wholly new programs which are more costly per student than present programs. In brief, these cost estimates reflect two sources of increase: the larger enrollments expected; and the increased cost of securing faculty and other educational services, and rising operating costs of facilties.

The figures shown here for State University are presented on a different base than the $356.3 million estimated to be needed in State appropriations in 1970-71 as reported in State University's 1964 Master Plan. A reconciliation would require that the figures in Table 12 for both two- and four-year institutions be supplemented by estimates for the contract colleges (listed here with private colleges), new programs, new institutions, and the costs of separately budgeted research. It is believed that the result would not differ markedly from State University's estimate. Similarly, the estimate made here for City University makes only conservative allowances for the increased costs of new, higher level, and special programs planned or likely to be instituted.

These, then, are the costs which must be met if the citizens of the State of New York wish to provide the level of higher education that this Plan has outlined.

CAPITAL EXPENDITURES

A survey of all private institutions by the Office of Planning in Higher Education reveals contracts let or firm commitments made for construction totaling $379 million for the period from 1964 to 1970, with a concentration in the period from 1964 to 1967. Of this amount, $274 million is for classrooms and laboratories. The remainder is for libraries, office space, campus centers, auditoriums, dormitories, and related facilities. In addition, possible construction totaling $280 million had been seriously considered but no commitments made by the time of the survey. State University of New York has under way a facilities expansion program which is expected to cost approximately $1 billion by 1970, and City University of New York has proposed additional facilities costing between $240 million and $270 million in the next six years. Expansion of the community colleges to reach 1970 enrollment goals will require some $300 million for construction.

Outlays of these magnitudes are made necessary, in part, by the sheer numbers of qualified students who are expected to seek enrollment within the State. In part, the expenditures are required to catch up with the physical requirements for a college and university education of acceptable quality. Many institutions have been operating with facilities wholly inadequate for the quantity and quality of education they seek to offer. Finally, the outlays are needed to supply the facilities in future years to progress toward the goal that all who have the potential and desire for post high school education in New York State will be served.

It will be increasingly important during the quadrennium of this Plan to achieve careful coordination of facilities expansion scheduled to take place after 1968. From 1964 to 1968 a rapid increase in the amount and quality of facilities in the private institutions, State University, City University, and the community colleges will be absorbed promptly by expanding enrollments. However, the demonstrably slower rate of expansion after 1968 will make any miscalculation of the quantity, type, or location of new facilities both more obvious and more wasteful. This could result from unilateral action by a college or university.

2. CURRENT INCOME

A brief analysis of current income will give a more complete picture of the finances of higher education. Data basic to this analysis are shown in Table 13. It shows the differences in income sources between kinds of institutions, and the changes in income sources from 1957 to 1961.

Student fees were the largest single source of income for private institutions, but constituted only 42 per cent of the total. This proportion remained the same over the five-year period, even though total income rose 62 per cent. The rise in tuition charges (see Figure 11, page 47), therefore, should not be interpreted as a relaxation of efforts by colleges to secure funds from other sources. Although not shown by data in Table 13, many smaller private institutions receive a much higher percentage of their income from tuition and fees. These institutions are quite numerous but enroll relatively few students as compared to the larger private institutions, which have a greater influence on the figures reported.

TABLE 13

Sources of College and University Income, New York State Institutions, 1957-58 and 1961-62

Source of Income	Classification of Institution and Percentage Distribution of Total Income			
	Private Coll. & Univ.[1]	CUNY	SUNY[2]	Community Colleges
Student Fees				
1957-58	42	16	9	42
1961-62	42	16	7	40
Endowment Earnings				
1957-58	11	*	*	*
1961-62	8	*	*	*
Gifts and Grants				
1957-58	11	*	1	*
1961-62	10	*	2	*
Public Sources				
1957-58	18	84	88	58
1961-62	25	81	80	60
Sales and Service				
1957-58	9	*	1	*
1961-62	8	2	*	*
Other Sources				
1957-58	9	*	*	*
1961-62	7	*	11[3]	*
Total Income				
1957-58				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$312.2	$ 38.4	$ 38.2	$ 8.3
1961-62				
Per cent	100.0	100.0	100.0	100.0
Amount (millions)	$504.3	$ 55.0	$ 59.2	$ 18.4
Percentage Increase—1957-1961	62	43	55	122

* Less than ½ of 1 per cent.

[1] Includes contract colleges at Cornell University.

[2] Excludes contract colleges at Cornell University.

[3] According to information supplied by State University this apparent rise in "Other Sources" of income is the result largely of a change in reporting techniques rather than a change in income sources.

Source: Compiled from the College and University Financial Reports submitted to the State Department of Education.

Public sources supplied the second largest amount of income for private institutions in both years. Funds from public sources include all payments from government sources (local, State, Federal) and payments toward current institutional expenses including contract research, but do not include local, State, or Federal payments to students for scholarships, loans, or other types of student aid.

Income at units of State University, excluding the contract colleges and the community colleges, rose 55 per cent during this period. The apparent large rise in the percentage of income from "other sources" is more a change in reporting techniques than a change in income sources, although some of the latter did occur. It is to be expected that data for 1963-64 and subsequent years will show a larger proportion of income arising from student fees because of the establishment of a uniform tuition policy in State University. While complete figures are not yet available, it is estimated that tuition and fee income may reach 25 per cent of the total income for State University. However, this income, under present legislation, is earmarked for debt service on the securities being issued to finance the construction of facilities needed by State University.

At City University income has increased approximately 43 per cent over the period, but with no particular changes in the sources from which it was drawn. Student fees constituted 16 per cent in each year and public sources made up almost all of the remainder.

The community colleges reported the largest percentage rise in income in the period under study. The 122 per cent increase reflected the increase in the number of community colleges and in their enrollment. However, the relative sources of income remained almost constant between 1957 and 1961 at approximately 40 per cent from student fees and 60 per cent from public sources.

IMPLICATIONS FOR PLANNING

Needed expansion of higher education in New York State will require measures to stretch revenues. Some of these may be repugnant and contradictory to cherished traditions, but such possibilities as more efficient schedules and longer academic calendar, better use of plant, increased inter-institutional cooperation and collaboration, mergers of institutions, specialization within the merged system, and even some absorption of one college by another, may be wise and necessary.

New educational technology offers a partial solution of the problems of rising numbers and rising costs per capita. Every effort should be made to take advantage of technological progress whenever improved results are probable. However, proposed innovations often are slow to achieve technical feasibility for every-day use and are even slower to achieve wide adoption. Impact on costs during the four years covered by this Regents Plan is not expected to be significant. A sober examination of the cost-reducing possibilities of new techniques points to the conclusion that their most common result will be the substitution of one type of cost for another, with some economy rather than a large reduction of expenditures.

3. CAPITAL FUNDS

Over the years the citizens of New York State have made a huge investment in physical facilities for higher education. The total value of these holdings reported in 1963 was approximately $2.0 billion (see Table 21, Appendix E) of which over $1.35 billion is held by private institutions, approximately $400 million by State University, approximately $80 million by City University (four-year units), and about $65 million by the community colleges. The striking fact is that by 1970, expenditures planned for capital development by all colleges and universities will require more dollars than the total value reported for all of the facilities now in existence.

The capital expenditures which will be required by the end of the decade clearly would place a severe burden on the people if financed from current income, either through taxation or contributions. This is a long-range investment in facilities, which in turn will contribute to lasting improvements in higher education.

In part, of course, this outlay is needed to enable State University of New York to achieve its objectives and full scope of services, an expenditure made larger by the relative recency of the University's establishment. Throughout much of their history, the central and western states have been building public institutions offering comprehensive programs. New York, like most of the states of the New England and Eastern Seaboard, has not followed this course, but until recently relied very heavily upon private institutions. In 1948 the State committed itself to building a State University to help meet its needs.

A related commitment which the State has long had but which also will require increased funds is the contribution toward the capital expenditures of City University. Modernizing and expanding facilities for undergraduate and graduate programs will be expensive but necessary.

If the plans of private institutions are to be realized, and if they continue to rely on contributions and to a lesser extent on current income for capital expenditures, these resources will be strained to the utmost. The institutions may be forced to undertake programs of borrowing in order to finance their anticipated outlays for capital facilities. The already sizable program of the State Dormitory Authority to finance, construct, and equip all types of college buildings is witness to this fact (see page 7). Careful planning will be vital because the need for funds for amortizing costs of facilities may be competing with the need for funds for costs of operations. Insufficient revenue to meet both kinds of outlays would place an institution in fiscal difficulty.

The recent enactment by the Federal government of the Higher Education Facilities Act offers some assistance to public and private colleges in the financing of certain types of physical expansion. As currently written, the legislation provides approximately $19 million a year to New York State to be allocated to projects of colleges and universities, according to a State Plan administered by the Regents in accord with regulations of the Federal Office of Education. Funds of this amount, welcome as they are, will not go far toward meeting the physical expansion requirements of higher institutions in the State of New York.

4. NEW YORK'S ABILITY TO PAY

New York State is being called upon to make higher education available to more students, for a longer period of time, and, hopefully, at a higher level than ever before. The successful accomplishment of this task will require more funds by far than have ever been required in the past. Fortunately, however, a prosperous society will simultaneously be generating additional personal income which can be devoted to this and other kinds of outlays. Although the absolute number of dollars required will be setting new records each year, there will be an increased flow of income from which they may be secured.

That expenditures for higher education neither have been nor will be an unreasonable burden is evident when they are related to current personal income. Table 14 shows recent relationships between personal income in the United States and in New York State, New York higher educational expenditures, and the relationship between those expenditures and New York State personal income. In 1961 New York State spent only 1.28 per cent of personal income for higher education. The rapid growth of educational expenditures from $385.8 in 1957 and $620 million in 1961 was partially offset by the growth of New York State personal income from $41.2 billion to $48.6 billion in 1961. Thus, higher educational expenditures as a percentage of New York State personal income grew only about one-third of one per cent from 1957 to 1961.

TABLE 14

Personal Income and Expenditures for Higher Education

	Personal Income			N.Y. Educ. Exp.	
Year	U.S. (Billions)	N.Y. (Billions)	N.Y. as a % of U.S.	Millions of $	% of N.Y. Personal Income
			Actual		
1954	285.3	34.2	12.0	NA	NA
1955	306.6	36.5	11.9	NA	NA
1956	330.4	39.0	11.8	NA	NA
1957	348.7	41.2	11.8	385.8	0.94
1958	357.5	42.1	11.8	425.5	1.01
1959	381.3	45.2	11.9	471.7	1.04
1960	399.0	46.8	11.7	550.9	1.18
1961	415.0	48.6	11.7	620.0	1.28
1962	439.7	51.0	11.6	NA	NA
1963	463.4p	53.1p	11.5	NA	NA
			Estimated		
1968	560.0	64.4	11.5	1002.0*	1.56
1970	600.0	69.0	11.5	1200.0*	1.74

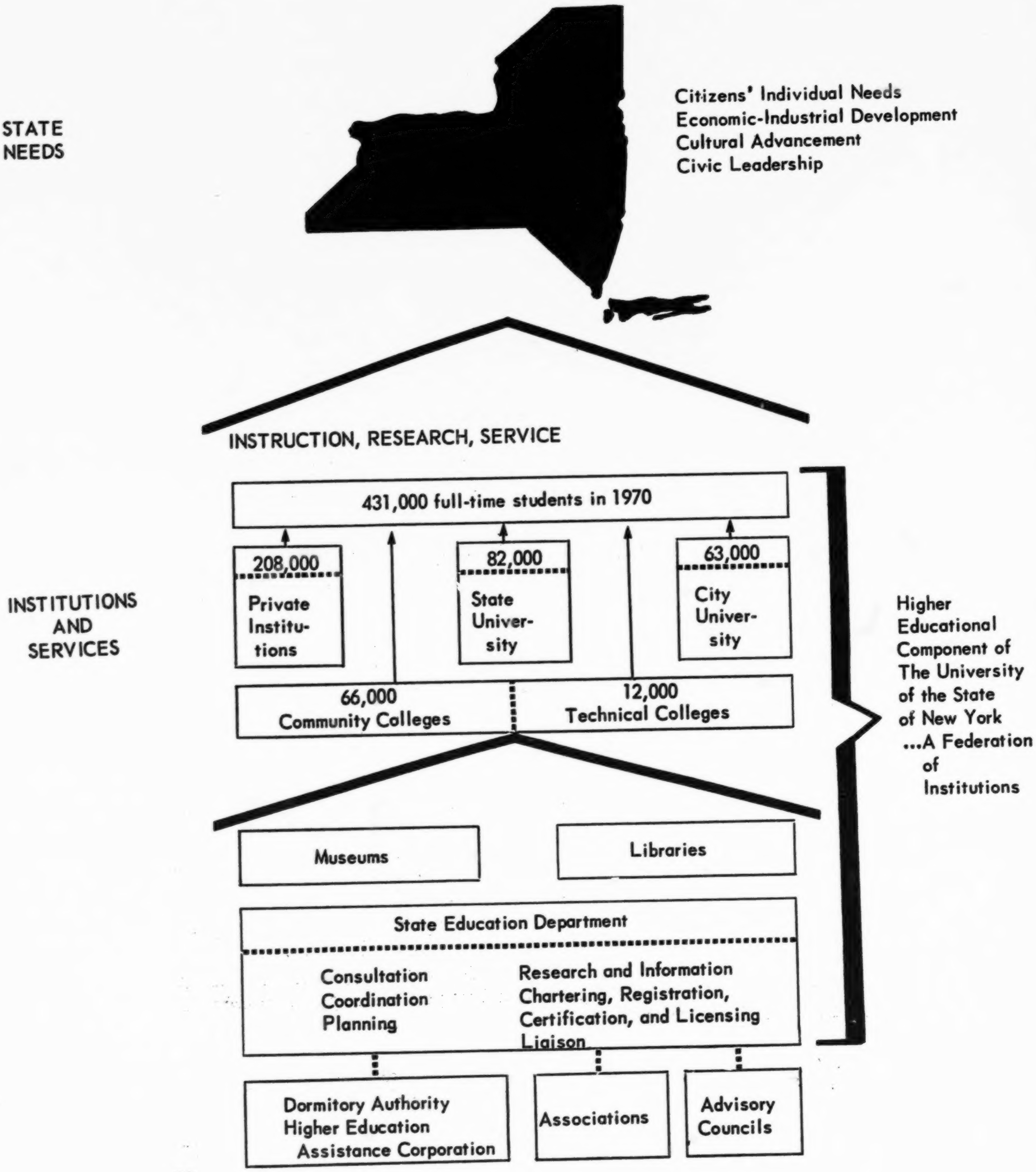
p Preliminary

* Estimated costs shown above are the costs shown in Table 12 plus estimates of $140,000,000 in 1968 and $150,000,000 in 1970 for separately budgeted research. These must be included for comparability with sums for educational expenditure in earlier years.

The last two lines of Table 14 provide an approximation for 1968 and 1970 of the relationship between educational expenditures in New York State and personal income to be anticipated. These years were selected because they mark, respectively, the date for the next Regents Plan and the end of the decade. If it is assumed that personal income will grow in the nation and in the State approximately as it has in recent years and operating expenses are estimated as stated, then in 1968 approximately one and one-half per cent of personal income would be required for higher education. By 1970 the relationship would call for approximately one and three-fourths per cent of the personal income earned by New York residents. The relative increase necessary to meet the requirements of 1968, in fact, is less than the relative increase which was required and met between 1958 and 1961.

The Empire State has never shirked its responsibility to support the best in education for its people. It has a national and worldwide reputation for the excellence of its educational program. Good as this has been, it is not adequate for the years ahead. The Board of Regents looks confidently to the future for continuation of action by the Governor, the Legislature, and the people at large that brought this reputation to New York State.

FIGURE 12
New York State's Complex of Higher Educational Needs, Services, and Institutions
(A Schematic Description)


STATE NEEDS
Citizens' Individual Needs
Economic-Industrial Development
Cultural Advancement
Civic Leadership
INSTRUCTION, RESEARCH, SERVICE
431,000 full-time students in 1970
208,000
Private Institutions
82,000
State University
63,000
City University
66,000
Community Colleges
12,000
Technical Colleges
INSTITUTIONS AND SERVICES
Museums
Libraries
State Education Department
Consultation
Coordination
Planning
Research and Information
Chartering, Registration, Certification, and Licensing
Liaison
Dormitory Authority
Higher Education Assistance Corporation
Associations
Advisory Councils
Higher Educational Component of The University of the State of New York ...A Federation of Institutions

Part VII

SUMMARY AND PERSPECTIVE

The Regents 1964 Plan touches upon all levels, sectors, and all major aspects of higher education in accord with the general provisions of the 1961 legislative act which established requirements for continuing statewide planning. This comprehensive treatment of higher education in a state as large and complex as New York resulted in a Plan that is extensive and complex.

To provide a summary and perspective of the Plan, Part VII highlights and states briefly: (1) the guiding principles which are apparent throughout the Plan, (2) the needs in higher education, and (3) the anticipated results from implementation of the Plan. Section (4) presents the Regents proposals and recommendations.

Schematically, the institutions of higher education, organizations, services, and their interrelationships are shown in Figure 12.

1. PRINCIPLES

Certain fundamental themes run throughout this report. They had constant influence on the specific proposals and recommendations because they are general principles which the Regents believe should guide the expansion of higher education in the State. The guiding principles of major importance are:

(a) The main direction of higher educational development should be toward increased service to help individuals reach fulfillment of their talents, interests, and ideals; to strengthen the economy; to advance knowledge; and to help the State keep a position of leadership in the nation and the world.

(b) The University of the State of New York under the Board of Regents provides a legal and operational **federation of colleges and universities,** a structural advantage in higher education unique in the nation.

(c) Society cannot afford the waste of human resources represented by the present gap between college attendance and college ability in New York State.

(d) Opportunity for college study should be readily accessible at all levels to students throughout the State, and students should be able to choose the colleges and programs on grounds other than the costs they would incur.

(e) Quality of educational service is an essential in every type and level of post high school program.

(f) Enrichment of educational programs is possible in many ways and through many resources, but particularly by use of the State's excellent museums, libraries, and related cultural centers.

(g) For economy and efficiency of higher educational operations, the full use of all available resources, private and public, is mandatory.

(h) Cooperation among colleges and universities will help conserve scarce resources as well as improve the effectiveness of their programs of instruction, research, and community service.

(i) Planning in higher education is a continuing and constant effort and the foundation for orderly, coordinated, constructive development for the future.

2. NEEDS

The magnitude of the task ahead is a reflection of rising numbers in the population, rising aspirations of the people for college experience, and rising educational requirements for effective living in a modern economy and society.

The first need is to develop the means to serve the 431,000 full-time students (including undergraduates and graduates) who are expected to enroll in the colleges of the State by 1970. Within this achievement must be included the variety of programs necessary to prepare four special and overlapping groups—college-age youth, older adults seeking to further their education, women, and members of culturally deprived segments of the population—to take new and productive places in society.

Within the total expansion of higher education there must also be increased emphasis on instruction and research at the graduate level. Upon the quality of graduate education rests the quality of all education through discovery of new knowledge and production of the faculty for the colleges and teachers for the lower schools. Graduate education, especially at the advanced doctoral level, also maintains the quality of research, development, and production in industry, business, government, and the professions. Weaknesses in graduate education, therefore, produce cumulative deficiencies of far-reaching consequences.

Finally, there is need to lower the barriers to educational opportunity beyond the high school. A constant attack on these is necessary, be they the costs to students or parents, the geographic inaccessibility of colleges in relation to students' homes, or the limitation of choices in college curriculums when compared to the wide array of student interests. The ideal objective is to reach the full potential estimated to be between 480,000 and 612,000 by 1970, as compared to the 431,000 actual full-time enrollment expected at that time.

3. ANTICIPATED RESULTS

The higher educational component of The University of the State of New York, which embraces all higher educational institutions in a **federation of colleges and universities,** provides both an operational and legal framework through which efforts can be concentrated, problems can be attacked, and expanded services can be planned. By interrelating all the institutions, whether under private or public control, and by drawing on all their resources, the Regents Plan, if fully implemented, will enable the State to meet its needs through 1970. Such implementation will require action by the private colleges, State University, City University, the community colleges, the voluntary higher educational associations, the State Education Department, the Board of Regents, and the Legislature and Governor.

OVER-ALL RESULTS

Major developments of statewide importance will be:

(a) There will be enough places in the colleges and universities within New York State to accommodate the estimated full-time enrollment of 431,000 students by 1970.

(b) While for many reasons (many of them cultural and social and others economic or educational) the full college-going potential in New York State's population (between 480,000 and 612,000) will not actually be attending college in 1970, significant progress toward this ideal will have been achieved.

(c) There will be an over-all equality of opportunity and a reasonable freedom of choice between attendance at public or private institutions and between different institutions in each category.

(d) A good quality of education will be provided for each qualified student seeking to further his education beyond high school.

(e) There will still remain serious shortages of trained manpower with specialized talent in several fields, such as in the health science professions and technologies, but additional measures to lessen these shortages will have been taken.

(f) The critical shortage of college faculty will have been faced and initial steps to overcome resulting weaknesses will have been taken.

(g) The range and depth of services in the nature of consultation, research, and information, planning, coordination, and other special assistance provided to colleges and universities of the State by the State Education Department will be materially greater.

(h) University centers of excellence as stimuli and service agencies in scientific and technological instruction and research to strengthen the State's industrial and economic development will be stronger and more numerous.

(i) A more complete utilization will be made of the many diverse resources in higher education, including not only the colleges and universities, but also the libraries and museums; moreover, steps toward linking these multiple resources with each other by television and other new technical schemes will have been taken.

IMPACT ON INSTITUTIONS

Beyond these achievements this Plan will produce other constructive results which bear specifically on each of the major sectors of higher education in the State.

PRIVATE INSTITUTIONS

This Plan will enable the private colleges and universities (representing an investment of approximately $1.5 billion in physical plant and $0.5 billion in annual operations) to continue their historical service to the State and to extend it in several important ways.

(a) The diversity of private higher educational institutions in terms of size, types of program, control, and constituencies served will be preserved.

(b) Colleges seeking to serve larger numbers of students with a broader range of interests and talents will be encouraged.

(c) Graduate programs and professional schools will have increased capacities to produce needed highly trained personnel.

(d) Faculty for instruction at all levels and for research will be strengthened.

(e) Inter-institutional programs to conserve human and material resources in short supply will be expanded and increased.

(f) Institutional long-range plans will be in greater use as foundations for sounder development of these colleges and as bases for greater efficiency in academic and administrative operations.

STATE UNIVERSITY

Implementation of this Plan will enable State University of New York to progress noticeably toward its triple goals of unity, identity, and excellence.

(a) The University's structure will more fully recognize differentiated functions of University Centers, General Colleges, and two-year technical colleges and community colleges.

(b) Increased University autonomy within the over-all framework of State government will expedite improvement in institutional operations and academic programs.

(c) Graduate studies, research productivity, and the number of professional schools will be increased.

(d) Libraries, laboratories, and other needed instructional resources will be more complete throughout the University.

(e) A better geographic distribution of four-year colleges and two-year colleges will be in evidence.

(f) Internal communications for both administrative and academic purposes will be strengthened.

CITY UNIVERSITY

The Plan, further, will enable City University of New York to continue its growth in providing opportunity to the people of New York City and to develop with distinction.

(a) The number of students served will be increased materially.

(b) Graduate programs, professional schools, and research productivity will be increased.

(c) The University will have better means to recruit and retain qualified faculty for all of its units and for different levels of instruction and research.

(d) Experimentation and research programs related to problems of the large urban center will be expanded.

(e) Involvement of the University in programs of cooperation with other colleges and universities and with related cultural centers will continue at an accelerated pace.

(f) Physical facilities, especially those needed for graduate instruction and research, will be more adequate.

(g) A sounder method of providing State aid for both operating and capital development purposes will be effected.

COMMUNITY COLLEGES

Community colleges by this Plan will become stronger instruments for democratizing educational opportunity beyond the high school and, collectively, a more complete educational foundation to support the junior-senior and graduate programs of other higher educational institutions. Further, they will increase their services to business and industry by producing more trained technicians and semiprofessional workers.

(a) The local control by boards of trustees of these institutions will be clarified and strengthened.

(b) A clearer public understanding will emerge of the educational task to be performed by the public community colleges in relationship to other levels of formal education.

(c) Improvements will be effected in the procedures followed in financing community colleges, especially in matters relating to "charge backs" to home counties of students enrolled.

(d) Curriculums will be made more comprehensive, and guidance and counseling services to students more adequate.

(e) These colleges will be enabled to turn out more technicians and semiprofessional workers and in more fields. Moreover, their role in doing this will be better coordinated and articulated with local school vocational education programs.

(f) An attack will be launched on the critical problem of acquiring the needed number of community college instructors, especially those in occupational fields of study.

(g) Community college programs will be coordinated more fully with those of the technical colleges of State University.

4. REGENTS PROPOSALS AND RECOMMENDATIONS

Proposals and recommendations advanced by the several interested sectors of higher education in New York State are presented and discussed in Parts IV and V of this Plan. Those which appeared in the Master Plans of State University and City University, approved by the Regents for submission to the Governor and the Legislature, are already listed in Part IV, pages 30-38. For convenience of the reader, the additional proposals and recommendations by the Regents, presented earlier in the different sections of Part V, are all listed below.

TO MEET THE NEEDS OF INDIVIDUALS, THE REGENTS:

(1) Set as the goal for 1970 a statewide enrollment of approximately 431,000 full-time undergraduate and graduate students. Within this figure the private colleges are expected to enroll 208,000, State University and the public community colleges together, about 160,000, and City University, approximately 63,000 students. (The figures for the two public universities were derived independently of those reported as target figures set forth in their 1964 Master Plans. The order of magnitude of the enrollments projected, however, agrees closely. (p. 40)

(2) Recommend that all institutions which have not done so already make plans for more efficient utilization of facilities and faculties. High priority to such plans is essential to the achievement of statewide enrollment goals and to higher quality performance. (pp. 42-43)

(3) Will prepare and publish annual revisions and extensions of projections of enrollment for all categories of students and types of institutions to assist future planning by State University, City University, and the private institutions. (pp. 43-45)

(4) Recommend that State University of New York examine its policies on student admission and the provision of institutional facilities, especially dormitories, in the light of currently available data on geographic mobility of students. Announcement of a definite policy by State University is necessary for regional planning on the part of other colleges and universities. (pp. 43-44)

(5) Recommend that State University develop plans for expanding enrollment in community colleges by greatly increasing regular day work-study and other programs which make postsecondary education available to recent high school graduates and adults who would not otherwise be reached. (pp. 45-50)

(6) Recommend that private four-year colleges and universities which have unfilled places for new students at junior-year level give full information to the community and junior colleges. Such information should include number of vacancies and the procedures for student transfer with minimum loss of time and energy. (p. 49)

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* Pages in parentheses refer to related portions in the text.

(7) Recommend that consideration be given to the establishment of a program of "Regents Junior Year Transfer Scholarships" for community and junior college transfer students who demonstrate superior promise for continued college study while attending community colleges or privately controlled junior colleges. (p. 49)

(8) Recommend to City University and State University that in planning for new baccalaureate degree institutions, further consideration be given to the feasibility of the creation of upper-level colleges. These colleges start at the typical junior year and continue through the master's level in suitable academic fields. (pp. 45-51)

(9) Recommend that the Legislature return to the principle of fixing the number of Regents College Scholarships to be awarded each year as a percentage of total high school graduates to avoid discriminating against the able students of the future who will be members of larger graduating classes. (p. 51)

(10) Will seek adjustments periodically in the amounts awarded under the Regents College Scholarship, the Scholar Incentive Program, and other assistance to students. This is necessary to keep student aid realistically related to the costs which students and parents must bear to elect programs and colleges of their choice. (p. 51)

(11) Recommend that State financial assistance, similar to that provided to college students through the Scholar Incentive Program, be granted to student nurses in registered nurse programs at hospital schools of nursing. (p. 51)

(12) Will direct the State Education Department to make a special study of the programs and costs carried by students entering other types of specialized post high school institutions (business schools, single-purpose technical schools, etc.) to determine whether the State should provide some form of financial assistance to students in such institutions. (p. 51)

(13) Recommend that State University and City University for institutions within their respective systems clarify and describe procedures to facilitate placement and transfer of students, and make this information available to all other interested institutions. (pp. 49-50)

(14) Recommend that City University move rapidly to strengthen the faculties and programs of the Schools of General Studies (programs now for late afternoon and evening study), emphasizing their function of providing upper-division work for transfer students from community and junior colleges. (pp. 50-51)

(15) Recommend that all higher educational institutions improve their services to the culturally deprived by using the plan for institutional self-evaluation and the guidelines as formulated by the College Committee on the Disadvantaged appointed jointly by the Association of Colleges and Universities of the State of New York and the Commissioner of Education. (p. 51)

TO MEET THE NEEDS OF THE ECONOMY AND OF THE SOCIETY FOR SPECIALIZED MANPOWER, THE REGENTS:

(16) Recommend that all institutions of higher education which are expanding to help meet the State's manpower needs, build on already established strengths or pay special attention to the foundations laid before new programs of expansion are undertaken. (p. 61)

(17) Recommend that leadership in the private two-year colleges seek to develop a greater balance between transfer and occupational curriculums. This should be undertaken especially by those colleges which serve constituencies that in interest and talent are representative of the general population. (pp. 58, 63)

(18) Recommend that community and junior colleges expand their counseling and guidance services, with particular emphasis on occupational selection and training. (p. 59)

(19) Recommend that the private colleges seeking to expand occupational programs review carefully the opportunities that currently exist for Federal financial assistance for programs to develop technicians and semi-professional workers. (p. 63)

(20) Will direct the State Education Department to study the special costs faced by high school graduates who enter post high school occupational programs and to determine the feasibility and desirability of helping students to defray the costs. (p. 63)

(21) Will appoint a special committee representing the four major sectors of higher education in the State to prepare a plan for increasing the supply of trained community and junior college instructors in occupational fields. (pp. 59, 63)

(22) Will direct the State Education Department, in cooperation with State University, to give attention to the needs for in-service training of community and junior college instructors in occupational fields. These instructors should be helped to engage in organized periods of study to improve their effectiveness as college teachers. Persons with strong backgrounds of experience in technical and semi-professional work but with limited academic training should be aided in overcoming this deficiency. (pp. 59, 63)

(23) Will continue to encourage an articulated and coordinated development of both area vocational programs under local public school auspices and community college programs leading directly to employment as technicians and semi-professional workers. The State should continue to make full use of all available resources for preparing technicians and semi-professional workers, and such complete utilization should emphasize coordinated planning and development at both local and State levels. (p. 63)

(24) Recommend that the Education Law be amended to permit public two-year colleges to offer programs of less than two years' duration as regular day offerings when these programs meet the needs of persons who have graduated from high school or are beyond the usual age of high school attendance. (p. 59)

(25) Will direct the State Education Department, in cooperation with State and City Universities and the Association of Colleges and Universities of the State of New York, to review present practices of all institutions offering extension services and to develop a statewide plan to expand, coordinate, and make effective use of extension programs. (pp. 59-60, 64)

(26) Will continue to review periodically the number of graduate fellowships authorized in New York State and the level of stipends provided for these fellowships to determine improvements made necessary by changing economic and educational conditions. (p. 61)

(27) Recommend that the Trustees of State University and the Board of Higher Education of City University give special attention to steps which

would integrate specialized institutions with those which are more comprehensive in scope. Special purpose colleges both at undergraduate and graduate levels which do not have clear operating relationships within general purpose centers of instruction and research should be discouraged. (p. 61)

(28) Will request the Legislature to authorize funds for a feasibility study of the establishment of a cooperative computer facility beyond the resources of any one institution to acquire, this facility to be used to strengthen graduate education and research. (p. 62)

TO STRENGTHEN INSTITUTIONS, THE REGENTS:

FACULTY

(29) Will direct the State Education Department staff in Higher Education to give special attention during the coming year to the impending shortage of new college teachers and to encourage and assist appropriate groups in taking steps to offset this emergency, including the following:

Consult with the Council on Graduate Education and the Advisory Council on Higher Education on ways in which the time lapse between the bachelor's degree and doctorate may be shortened; take all possible steps to implement any feasible plan that can be developed.

Review and report to the Regents on the desirability and feasibility of the suggestion that a new degree be created short of the Ph.D. but involving a well-conceived new program of research and study.

Consider ways in which retired professors could be encouraged and assisted to continue to serve.

Give special attention to the recent report of the Governor's Committee on the Education and Employment of Women and seek the Committee's further advice and assistance in respect to college instruction.

Organize a coordinated effort by colleges and interested civic groups to activate in each major region of the State a "college faculty resources registry"—a directory listing of qualified personnel interested in part-time employment as college teachers. (pp. 66-67)

(30) Will explore with college administrators and representative faculty members possible ways to identify prospective college teachers early in their undergraduate programs and to encourage them in reaching their objectives. (pp. 66-67)

(31) Recommend the establishment by the Legislature and Governor in 1965 and subsequent years of legislative support for a program of distinguished visiting professors at undergraduate colleges. (p. 67)

(32) Recommend that groups of colleges and universities that have close geographic and other ties develop interinstitutional cooperative programs and joint use of resources, human and material, to further the scope of their services to students and to the State. (pp. 66-67)

FACILITIES, BUDGETS, ORGANIZATION—PUBLIC HIGHER EDUCATION

(33) Will continue to support any additional legislative action needed to give State University the autonomy of administrative operation typical of the strongest state universities in the country. (p. 68)

(34) Recommend that the Education Law be amended to abolish the pro-

vision authorizing establishment of a four-year community college. (pp. 68-69)

(35) Recommend that the Education Law be amended to provide that after a local sponsoring agency acts to establish the first community college in a given geographic area, the same agency must also be the sponsor of all later community college developments in that area. (pp. 68-69)

(36) Recommend that the Education Law be amended to clarify the realms of administrative jurisdiction and responsibility of the local sponsoring agency and the local boards of trustees of community colleges so that only the latter controls institutional operations such as the development of the budget, qualifications of staff, and specifications of physical plant equipment as well as matters of program development and instruction. (p. 68)

(37) Recommend that the Education Law be amended to provide that, when a student leaves his home area where a community college exists, to attend one located elsewhere and enrolls in a program offered by the community college in his home area, no "charge back" to the area of residence should be levied. Provide further that exception to this general rule can be made for individual students if approved by the board of trustees of the community college in the student's area of residence. (p. 69)

(38) Recommend that the Education Law be amended to establish another "charge back" to apply to costs incurred by a local supporting area for capital development and purchase of major equipment, with provisions similar to those relating to operating expenses. (p. 69)

(39) Recommend that the Board of Trustees of State University give further study to advantages and disadvantages of dormitories at community colleges. (pp. 68-69)

(40) Recommend that State University be given encouragement and support in strengthening its program of institutional research and fact finding to improve both its own understanding and to aid in public interpretation of such matters as characteristics of the student body, faculty supply and demand, and fiscal needs for current operations and capital outlay. (pp. 68-69)

(41) Will direct the State Education Department in cooperation with City University to study the merits of amending the Education Law to remove the identification of City University with the New York City public schools. (p. 68)

(42) Have requested the Commissioner of Education, in consultation with the President of State University and the Chancellor of City University, to recommend a course of action for clarifying the State's relationship to City University for the consideration of all interested parties as soon as possible. (p. 68)

(43) Recommend that consideration be given to amending the Education Law to authorize State appropriations for current operations to City University to be made on a current rather than a reimbursement basis. (p. 68)

(44) Recommend that the Education Law be amended to give a continuing statutory basis to the present legislative practice of providing from State appropriations payments to New York City to assist it to meet costs of physical facilities for higher education. (p. 68)

(45) Recommend that consideration be given to amending the Education Law to authorize payments from State monies to City University for use in

paying half the cost of **construction** of physical facilities as opposed to half the cost of **debt service** for higher educational capital development, as is now the case. (p. 68)

(46) Recommend that consideration be given to making payments for construction costs to the Board of Higher Education rather than to the Board of Estimate of the City of New York so that the University can participate more fully and flexibly in the programs of the State Dormitory Authority and the Higher Education Facilities Act of 1963. (p. 68)

(47) Recommend that there be developed an equitable over-all formula for determining the State appropriation to City University, including graduate education, and that this formula be advanced as an amendment to City University's Master Plan as soon as possible. (p. 68)

NEW APPROACHES TO TEACHING AND LEARNING

(48) Recommend that all New York colleges and universities promote the practice of granting advanced credit in those fields for which proficiency examinations have been passed, regardless of whether the competence of the student was developed through formal instruction or through independent study. (pp. 70-71)

(49) Will expand the number of fields of studies for which State Education Department proficiency examinations are available as rapidly as possible, with priority given to such courses as anthropology, business, professional education, and statistics. (pp. 70-71)

(50) Recommend that institutions serving large enrollments or offering complex, advanced programs, plan as rapidly as possible to develop on-campus educational television facilities (closed circuit or 2500 megacycle transmission). (pp. 70-71)

(51) Recommend that individual institutions (public and private) consider the development of a "college communications center" and programs of training of faculty in the use of all parts of such a center. These centers facilitate a coordinated and complete use of educational communications materials and equipment, such as radio, television, programmed instruction, library resources, and computer-related instructional aids. (pp. 70-71)

(52) Will continue to cooperate with State University, other colleges and universities, and the educational television councils in bringing to realization a truly statewide educational television network. (p. 71)

(53) Recommend that all colleges and universities, private and public, which have not yet done so, intensify their studies, experimentations, and actions to establish year-round operations, and in doing so examine not only the mechanics involved but also ways to provide a full range of programs throughout the year. (pp. 70-71)

LIBRARIES

(54) Recommend establishing a statewide system of regional reference and research libraries along the lines described in the Regents special committee report of 1961; this should be set in motion by a pilot project for which the Regents have requested funds from the Governor and Legislature for 1965-66. (pp. 72-73)

MUSEUMS

(55) Recommend that institutions of higher education increase their use of the resources available in the museums of the State by establishing addi-

tional cooperative relationships for research and undergraduate instruction. Joint use of facilities and highly specialized staff in such areas as anthropology, history, and fine arts is urged, along with the development of more formally organized opportunities for students to earn college credit through individual study and proficiency examinations. (pp. 73-74)

(56) Have drafted a statewide plan for expanding and strengthening museum services and urge that legislation implementing this plan and providing budgetary support for it be enacted. (p. 74)

TO IMPROVE STATE SERVICES TO THE COLLEGES, THE REGENTS:

(57) Recommend that each private college and university develop by 1968 a "perpetual inventory" type of long-range plan, looking ahead at least five years for program and fiscal development. (p. 75)

(58) Will direct the State Education Department to seek to develop better per-student cost figures on which to base cost estimates and comparisons through a study of fiscal procedures employed. The study should be undertaken in cooperation with the Board of Trustees of State University, the Board of Higher Education of the City of New York, and the privately controlled colleges and universities. (p. 75)

(59) Will establish in the State Education Department at an early date an Office of Science and Technology. (pp. 75-76)

(60) Will establish a periodic survey of college-going aspirations and other related characteristics of high school seniors, using fully the Regents Scholarships Examination which already reaches annually approximately 65 per cent of the high school graduates in the State. (p. 76)

TO GUIDE AND ENCOURAGE THE DEVELOPMENT OF NEW PROGRAMS AND INSTITUTIONS, THE REGENTS:

(61) Will direct the Education Department to develop a plan in consultation with chief executive officers of colleges and universities representative of The University of the State of New York, to provide guidelines and more formal procedures for the establishment under either public or private auspices of new curriculums, new institutions of higher education, new college branches, or extension centers. These guidelines and procedures should guarantee the widespread discussion and review of proposed new developments by the academic community in New York State before formal action is taken by the Regents or the Department. (pp. 77-78)

(62) Recommend that the conditions of incorporation of a college, now requiring at least $500,000, be changed to $1,000,000; except that the former figure will remain for incorporation of new junior colleges. (p. 78)

(63) Recommend that the Legislature appropriate the sum of $500,000 annually to be used by the Board of Regents to contract with colleges, public or private, for the development of the initial phases of programs in areas of critical State need, the contracts to be made for a period not to exceed five years, and to require a contribution of specific institutional resources. (p. 78)

APPENDIX A

EXCERPTS FROM CHAPTER 388 LAWS OF NEW YORK, 1961

AN ACT to amend the education law, in relation to the regents plan for the development and expansion of facilities for higher education in New York state and establishing the city university of New York, and repealing section eight hundred fifty-four thereof

Became a law April 11, 1961, with the approval of the Governor. Passed, on message of necessity, pursuant to article III, section 14 of the Constitution, by a majority vote, three-fifths being present

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The education law is hereby amended by adding thereto a new section, to be section two hundred thirty-seven thereof, to read as follows:

§ 237. Regents plan for higher education including approved plans of state university and city university of New York. 1. The regents shall, once every four years, review the proposed plan and recommendations required to be submitted by the state university trustees pursuant to section three hundred fifty-four of this chapter and the proposed plan and recommendations of the board of higher education in the city of New York required to be submitted pursuant to section sixty-two hundred two of this chapter, and upon approval of such plans by the regents they shall be incorporated into a regents plan or general revision thereof for the expansion and development of higher education in the state. Such regents plan shall include the plan and recommendations proposed by the state university trustees and the plan and recommendations proposed by the board of higher education in the city of New York and may include plans with respect to other matters not comprehended within the plan of the state and city universities, including but not limited to improving institutional management and resources, instruction and guidance programs, financial assistance to students and extension of educational opportunities through library resources and television. In the development of such plans due recognition shall be given to that historical development of higher education in the state which has been accomplished through the establishment and encouragement of private institutions. In determining the need for additional educational facilities in a particular area, the plans and facilities of existing public and private institutions shall be fully evaluated and considered.

2. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the regents shall evaluate all available information with respect to the plans and facilities of private institutions and shall review and act upon the proposed plan and recommendations of the state university trustees and upon the proposed plan and recommendations of the board of higher education in the city of New York and incorporate such information, recommendations and each of the component plans so acted upon into a tentative regents plan or general revision thereof for the expansion and development of higher education in the state. Copies of such tentative regents plan or general revision thereof, as the case may be, shall be made available to the trustees of the state university, the board of higher education in the city of New York and the governing boards of all other institutions of higher education admitted to the university of the state of New York. Thereafter, after giving due notice, the regents shall conduct one or more hearings on such tentative regents plan or general revision thereof.

EXPLANATION—Matter in *italics* is new; matter in brackets [ ] is old law to be omitted.

3. The regents shall transmit their plan or general revision thereof for the expansion and development of higher education in the state to the governor and the legislature on or before the first day of December, nineteen hundred sixty-four and each fourth year thereafter, and such plan or general revision thereof shall become effective upon its approval by the governor.

4. Any modification recommended by the state university trustees or by the board of higher education in the city of New York to their respective plans, theretofore formulated and approved pursuant to section three hundred fifty-four or section sixty-two hundred two of this chapter shall be reviewed by the regents who may hold one or more hearings thereon after giving due notice thereof. As approved by the regents, such modification shall be made a part of the respective plans of the state university and of the city university and shall, together with any modifications the regents may make to that portion of their plan for the expansion and development of higher education in the state not comprehended in the plans of the state and city universities, be transmitted to the governor and the legislature, all of which shall then become effective upon approval by the governor as modifications of the regents plan. By the first day of November in each of the three years following the promulgation of the regents plan or general revision thereof, the regents shall summarize and report to the governor and the legislature any modifications made pursuant to this subdivision and shall include in such report a statement on the progress made in implementing the regents plan and their general recommendations with respect to higher education.

§ 2. Subdivision one of section three hundred fifty-two of such law, as last amended by chapter seven hundred thirty-four of the laws of nineteen hundred fifty-one, is hereby amended to read as follows:

1. There is hereby created in the state education department *and* within the [higher educational system of the state] *university of the state of New York* as established under the board of regents a corporation to be known as the state university of New York which shall be responsible for the planning, supervision and administration of facilities *and programs in accordance with the plan proposed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter,* and provisions for higher education supported in whole or in part with state moneys in accordance with the provisions of section three hundred fifty-eight hereof, and to perform such other duties as may be entrusted to it by law. Such corporation shall have the care, custody, control and management of the lands, grounds, buildings, facilities and equipment used for the purposes of the state-operated institutions of the state university, and it shall have power to protect, preserve and improve the same.

§ 3. Section three hundred fifty-four of such law, subdivision two having been amended by chapter two hundred ninety-nine of the laws of nineteen hundred fifty-five, and subdivision three having been amended by chapter six hundred ninety-eight of the laws of nineteen hundred forty-eight, is hereby repealed.

§ 4. Such law is hereby amended by adding thereto a new section, to be section three hundred fifty-four, to read as follows:

§ 354. Powers and duties of state university trustees planning functions. 1. The state university trustees shall, once every four years, formulate a long-range state university plan or general revision thereof and make recommendations to the board of regents and the governor for the organization, development, coordination and expansion of the state university and for the establishment of community colleges in areas suitable for and in need of such institutions, which plan and recommendations shall include the following:

a. Plans for new curricula.

b. Plans for new facilities.

c. Plans for change in policies with respect to student admissions.

d. Potential student enrollments.

e. Comments upon its relationship to other colleges and universities, public and private, within the state.

Prior to transmitting their long-range state university plan or general revision thereof to the board of regents and the governor the state university trustees may, after giving due notice, conduct one or more hearings on such plan.

2. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the state university trustees shall transmit their proposed plan or general revision thereof to the board of regents and the governor on or before the twentieth day of September in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the expansion and development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the state university and the establishment of community colleges until such plan is modified or revised in the manner provided herein.

3. By the twentieth day of September in each of the three years following the approval of the state university plan or general revision thereof pursuant to section two hundred thirty-seven of this chapter, the state university trustees shall report in writing to the board of regents and to the governor on the progress made in carrying out their responsibilities under such plan and their general recommendations with respect to public higher education, including recommendations as to modifications of such plan which the trustees deem essential to meet the then current demands upon public higher education. The state university trustees may also at any other time propose modifications which they then deem essential or desirable with respect to such plan. They may, after giving due notice, conduct one or more hearings on such modifications and shall transmit their recommendations therefor to the board of regents and the governor. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.

§ 5. The opening paragraph of subdivision one of section three hundred fifty-five of such law, as amended by chapter five hundred twenty-five of the laws of nineteen hundred fifty-three, is hereby amended to read as follows:

Subject to the [general supervision and approval of the board of regents] *provisions of the plan or general revision thereof proposed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter,* the state university trustees shall be responsible for:

§ 6. The opening paragraph of subdivision two of section three hundred fifty-five of such law, as amended by chapter five hundred twenty-five of the laws of nineteen hundred fifty-three, is hereby amended to read as follows:

The state university trustees are further authorized and empowered, subject to the [general supervision and approval of the board of regents] *provisions of the plan or general revisions thereof proposed by the state university trustees as approved by the regents pursuant to section two hundred thirty-seven of this chapter:*

§ 7. Section sixty-two hundred two of such law, as last amended by a chapter of the laws of nineteen hundred sixty-one, entitled "An act to amend the education law, in relation to the number of regents college scholarships and scholarships for education in engineering and science, to establish the New York state scholar incentive program, to remove existing restrictions on the authority of the state university trustees, the contract colleges and the board of higher education in the city of New York to establish tuition policy and to repeal subdivision eight of section six hundred twelve-a thereof and making an appropriation therefor," is hereby amended to read as follows:

§6202. Powers and duties. *1.* Such board of higher education shall be a separate and distinct body corporate, shall have the duties and powers of trustees of colleges as set forth in this chapter, unless otherwise specifically provided in this article, and the institutions and educational units which such board shall conduct shall be part of the common school system and shall have the powers and privileges of colleges and shall be subject to the visitation of the regents of the university. The control of the educational work of such institutions shall rest solely in the board of higher education which shall administer all educational units controlled by it, as and under the general name and title of the [college of the] city *university* of New York; but each unit of such [college] *university* shall be given an appropriate and distinctive designation, and any existing unit, constituting a college for women, shall retain its present, distinctive name.

2. a. The board of higher education in the city of New York shall, once every four years, formulate a long range city university plan or general revision thereof and make recommendations to the board of regents, and to the state university trustees for information and comment, for the organization, development, coordination and expansion of the city university of New York which plan and recommendations shall include the following:

(1) Plans for new curricula.

(2) Plans for new facilities.

(3) Plans for change in policies with respect to student admissions.

(4) Potential student enrollments.

(5) Comments upon its relationship to other colleges and universities, public and private, within the state:
Prior to transmitting their long-range plan or general revisions thereof to the board of regents and the state university trustees, the board of higher education may, after giving due notice, conduct one or more hearings on such plan.

b. During the calendar year nineteen hundred sixty-four and each fourth year thereafter the board of higher education shall transmit their proposed plan or general revisions thereof to the board of regents, and the state university trustees for information and comment on or before the first day of July in each such year. Such plan shall be reviewed by the board of regents and shall be subject to approval by such board. Prior to approval by the board of regents such plan shall also be subject to such comment as the state university trustees may wish to make pursuant to section three hundred fifty-four of this chapter on the plan or general revisions thereof required to be submitted by the state university trustees. As approved by the board of regents and incorporated into the regents plan or general revision thereof for the expansion and development of higher education in the state and, upon approval thereafter by the governor, such plan shall guide and determine the development and expansion of the city university of New York.

c. By the first day of September in each of the three years following the approval of the city university plan or general revision thereof pursuant to section two hundred thirty-seven of *this chapter, the board of higher education shall report in writing to the board of regents, a copy of which report shall be furnished to the state university trustees for information and comment, on the progress made in carrying out its responsibilities under such plan and its general recommendations with respect to the city university or its component colleges or other institutions in the city of New York including recommendations as to modifications of such plan which the board of higher education deems essential to meet the then current demands upon public higher education in the city of New York. The board of higher education may also at any other time propose modifications which it deems essential or desirable with respect to such plan. Such board may, after giving due notice, conduct one or more hearings on such modifications and shall transmit its recommendations therefor to the board of regents and the state university trustees for information and comment. Such modifications shall be subject to approval by the regents and thereafter by the governor in the same manner as such plan or general revisions thereof.*

APPENDIX B

SELECTED LIST OF REPORTS AND STUDIES RELATED TO PLANNING FOR HIGHER EDUCATION IN NEW YORK STATE

I. Related State and National Reports

Change/Challenge/Response: A Development Program for New York State. Albany, Office for Regional Development, 1964.

Changes in Annual Tuition of Liberal Arts and Education Programs in Colleges and Universities of New York State, 1959-60 and 1962-63. Albany, The State Education Department Division of Research in Higher Education, 1962.

College and University Current Income and Expenditures, 1960-61 and 1961-62. Albany, The State Education Department Bureau of Statistical Services, 1964.

College and University Degrees, New York State, 1960-61 and 1961-62. Albany, The State Education Department Bureau of Statistical Services, 1964.

Conant, James B., **Education of American Teachers.** New York, McGraw-Hill, 1963.

Education for the Health Professions: A Comprehensive Plan for Comprehensive Care to Meet New York's Needs in an Age of Change. A report to the Governor and the Board of Regents from The New York State Committee on Medical Education, Malcolm Muir, Chairman. Albany, The New York State Education Department, 1963.

Esterquest, Ralph T., **Proposals for Strengthening Medical Resources and Services in New York State.** Albany, The New York State Library, 1962.

Final Report to the W. K. Kellogg Foundation. The State Education Department Associate Degree Nursing Project, Robert E. Kinsinger, Director. Albany, The State Education Department, 1964.

Gardner, John, "Flight from Teaching," in **1963-64 Annual Report.** New York, Carnegie Foundation for the Advancement of Teaching, 1965.

Higher Education for American Democracy. A report of the President's Commission on Higher Education. Volume I, **Establishing the Goals.** New York, Harper & Bros., 1948.

Increasing College Capacity by Calendar Revision. A report to State University of New York by Nelson Associates. Albany, State University of New York Institutional Research Study, 1961.

Jobs 1960-1970, The Changing Pattern: Manpower and Technological Change in New York State. Albany, The New York State Department of Labor, 1960.

Long-Range Demand for Scientific and Technical Personnel. Prepared for the National Science Foundation by the U. S. Department of Labor Bureau of Labor Statistics. NSF 61-65. Washington, Government Printing Office, 1961.

Manpower Report of the President, and **A Report on Manpower Requirements, Resources, Utilization, and Training.** Washington, Government Printing Office, 1964.

Maul, Ray C., **Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1961-62 and 1962-63.** Washington, National Education Association Research Report 1963-R3.

Meeting the Increasing Demand for Higher Education in New York State. A report to the Governor and the Board of Regents. Committee on Higher Education (Marion B. Folsom, John W. Gardner, Henry T. Heald, Chairman), and Director of Studies Sidney G. Tickton. Albany, The State Education Department, 1960.

Meeting Manpower Needs in Science and Technology, Report No. 1: Graduate Training in Engineering, Mathematics, and Physical Sciences. A report of the President's Science Advisory Committee. Washington, Government Printing Office, 1962.

New York Women and Their Changing World. A report and recommendations from the Governor's Committee on the Education and Employment of Women, Mrs. Oswald B. Lord, Chairman. Albany, The State of New York, 1964.

Projecting New York State Job Patterns. A technical supplement to **Jobs, 1960-1970.** New York, New York State Department of Labor Division of Research and Statistics, 1961.

Prospects for Library Cooperation in New York City: Planning for More Effective Utilization of Reference and Research Resources. New York, Nelson Associates, Inc., 1963.

Reinert, The Very Rev. Paul C., S.J., President, St. Louis University, and Keppel, The Hon. Francis, U. S. Commissioner of Education, **Catholic Education and National Needs.** Reprinted from address delivered at the 61st annual convention of the College and University Department of the National Catholic Education Association, 1964. St. Louis, Office of Public Information, St. Louis University, 1964.

Report of the Commissioner's Committee on Museum Resources. Albany, The State Education Department, New York State Museum and Science Service, 1962.

Report of the Commissioner's Committee on Reference and Research Library Resources. The New York State Library, 1961.

Scientists, Engineers, and Technicians in the 1960's. Prepared for the National Science Foundation by the U. S. Department of Labor Bureau of Labor Statistics. NSF 63-34. Washington, Government Printing Office, 1963.

Stambler, Howard V., **Scientists and Engineers, 1960-70.** Reprinted from November, 1963 **Monthly Labor Review.** Washington, U.S. Department of Labor Bureau of Labor Statistics, Reprint No. 2428.

Starlin, Glenn, **Television and Higher Education: A Plan for Statewide Development in New York.** Albany, The State Education Department, 1962.

Strengthening and Coordinating Reference and Research Library Resources in New York State: A Study of Statewide Aspects of the Proposed Legislation Based on the Report of the Commissioner's Committee on Reference and Research Library Resources. New York, Nelson Associates, Inc., 1963.

Swerdloff, Sol, **Room at the Top for College Women?** Reprinted from May, 1964 **Occupational Outlook Quarterly.** New York, U. S. Department of Labor Bureau of Labor Statistics, Middle Atlantic Regional Office.

Technical Manpower in New York State. A forthcoming publication of the New York State Department of Labor Division of Research and Statistics.

II. Special Unpublished Studies and Surveys Completed for the Regents 1964 Plan

"Construction and Program Plans of Private Colleges and Universities in New York State, 1963-64." Office of Planning in Higher Education, State Education Department.

"Distribution of Enrollment in Colleges and Universities in New York State, 1959-1970." Office of Planning in Higher Education, State Education Department, 1964.

"Enrollment in New York State Institutions in 1960-1978." Office of Planning in Higher Education, State Education Department, 1965.

"High School Graduates and College-Age Population in New York State, Regions, and Counties (Projected to 1980)." Division of Research in Higher Education and the Bureau of Statistical Services, State Education Department.

McHugh, Robert, "Supply and Demand for Faculty Personnel in Colleges and Universities in New York State, 1963-64, Projected to 1970-71." Office of Planning in Higher Education, State Education Department.

"Projected Expansion of Existing Graduate and Professional Programs, 1963-70, New York State Colleges and Universities." Office of Planning in Higher Education, State Education Department.

"Projection of College Enrollments in New York State to 1980." Bureau of Statistical Services, State Education Department.

"Projection of College Potential Based on President's Commission Assumptions, 1959-60 through 1979-80." Office of Planning in Higher Education, State Education Department.

"Projection of College Potential Based on State Education Department Formula of Experience with Regents Scholarship Examinations, 1963-64 through 1980-81." Office of Planning in Higher Education, State Education Department.

"Residence and Migration of Students Attending Colleges and Universities in New York State, Fall, 1963." Office of Planning in Higher Education and Bureau of Statistical Services, State Education Department.

APPENDIX C

MEMBER HIGHER INSTITUTIONS OF THE UNIVERSITY OF THE STATE OF NEW YORK AND THEIR INSTITUTIONAL BRANCHES OPERATING IN NEW YORK STATE, 1964[1]

Institutions Classified as Four-Year	**County**	**Planning Region**
Adelphi University		
Adelphi University	Nassau	Long Island
Suffolk College	Suffolk	Long Island
Alfred University	Allegany	Elmira
Bank Street College of Education	New York	N. Y. Metropolitan
Baptist Bible Seminary	Broome	Binghamton
Bard College	Dutchess	Mid-Hudson
Biblical Seminary in New York	New York	New York City
Brentwood College	Suffolk	Long Island
Brooklyn Law School	Kings	N. Y. Metropolitan
Buffalo Bible Institute	Erie	Buffalo
Canisius College	Erie	Buffalo
Cathedral College of the Immaculate Conception		
Cathedral College of the Immaculate Conception	Kings	N. Y. Metropolitan
Lloyd Harbor, Huntington, L. I., Campus	Suffolk	Long Island
City University of New York		
Brooklyn College	Kings	N. Y. Metropolitan
City College	New York	N. Y. Metropolitan
Graduate Studies Division	New York	N. Y. Metropolitan
Hunter College	New York	N. Y. Metropolitan
Queens College	Queens	N. Y. Metropolitan
Clarkson, Thomas S. Memorial Col. of Technology	St. Lawrence	Northern
Colgate Rochester Divinity School	Monroe	Rochester
Colgate University	Madison	Syracuse
College of Insurance, The	New York	N. Y. Metropolitan
College of Mt. St. Vincent	Bronx	N. Y. Metropolitan
College of New Rochelle	Westchester	Rockland-Westchester
College of St. Rose		
College of St. Rose	Albany	Capital District
Town of Colonie Branch	Albany	Capital District
Colleges of the Seneca		
Hobart College	Ontario	Rochester
William Smith College	Ontario	Rochester
Columbia University		
Columbia University	New York	N. Y. Metropolitan
Barnard College*	New York	N. Y. Metropolitan
College of Pharmacy*	New York	N. Y. Metropolitan
Teachers College	New York	N. Y. Metropolitan
Cooper Union for the Advancement of Science & Art	New York	N. Y. Metropolitan
Cornell University		
Cornell University	Tompkins	Elmira
Cornell Medical College	New York	N. Y. Metropolitan
Divine Word Seminary	Livingston	Rochester
Dominican College of Blauvelt	Rockland	Rockland-Westchester
D'Youville College	Erie	Buffalo
Elmira College	Chemung	Elmira
Finch College	New York	N. Y. Metropolitan
Fordham University	Bronx	N. Y. Metropolitan
General Theological Seminary of the Protestant Episcopal Church	New York	N. Y. Metropolitan
George Mercer, Jr. Memorial School of Theology	Nassau	Long Island
Good Counsel College	Westchester	Rockland-Westchester
Hamilton College	Oneida	Mohawk Valley
Hartwick College	Otsego	Binghamton
Hebrew Union College-Jewish Institute of Religion	New York	N. Y. Metropolitan
Hofstra University	Nassau	Long Island
Holy Trinity Orthodox Seminary	Herkimer	Mohawk Valley
Houghton College	Allegany	Elmira
Immaculate Conception Seminary at Troy	Rensselaer	Capital District
Institute of Public Administration	New York	N. Y. Metropolitan
Iona College	Westchester	Rockland-Westchester
Ithaca College	Tompkins	Elmira
Jewish Theological Seminary of America	New York	N. Y. Metropolitan
Juilliard School of Music	Bronx	N. Y. Metropolitan

Institutions Classified as Four-Year	County	Planning Region
Keuka College	Yates	Rochester
King's College (The)	Westchester	Rockland-Westchester
Ladycliff College	Orange	Mid-Hudson
LeMoyne College	Onondaga	Syracuse
Long Island University		
Long Island University-University Center	Kings	N. Y. Metropolitan
Long Island University-Brooklyn College of Pharmacy	Kings	N. Y. Metropolitan
Long Island University-C.W. Post College	Nassau	Long Island
Long Island University-Southampton College	Suffolk	Long Island
M. J. Lewi College of Podiatry	New York	N. Y. Metropolitan
Manhattan College	Bronx	N. Y. Metropolitan
Manhattan School of Music	New York	N. Y. Metropolitan
Manhattanville College of the Sacred Heart		
Manhattanville College of the Sacred Heart	Westchester	Rockland-Westchester
Albany Branch	Albany	Capital District
Mannes College of Music	New York	N. Y. Metropolitan
Marist College	Dutchess	Mid-Hudson
Maryknoll Seminary	Westchester	Rockland-Westchester
Marymount College	Westchester	Rockland-Westchester
Marymount Manhattan College	New York	N. Y. Metropolitan
Mary Rogers College	Westchester	Rockland-Westchester
Mercy College	Westchester	Rockland-Westchester
Mills College of Education	New York	N. Y. Metropolitan
Molloy Catholic College for Women	Nassau	Long Island
Mount St. Alphonsus Seminary of Esopus, N. Y.	Ulster	Mid-Hudson
Mount St. Joseph College	Erie	Buffalo
Mount Saint Mary College	Orange	Mid-Hudson
Nazareth College	Monroe	Rochester
New School of Social Research	New York	N. Y. Metropolitan
New York College of Music	New York	N. Y. Metropolitan
New York Institute of Technology		
New York Institute of Technology	New York	N. Y. Metropolitan
New York Institute of Technology Westbury Branch	Nassau	Long Island
New York Law School	New York	N. Y. Metropolitan
New York Medical College	New York	N. Y. Metropolitan
New York University	New York	N. Y. Metropolitan
Niagara University		
Niagara University	Niagara	Buffalo
Our Lady of Angels Seminary	Albany	Capital District
Notre Dame College of Staten Island	Richmond	N. Y. Metropolitan
Nyack Missionary College	Rockland	Rockland-Westchester
Pace College		
Pace College	New York	N. Y. Metropolitan
Pleasantville Institutional Branch	Westchester	Rockland-Westchester
(The) Passionist Monastic Seminary	Queens	N. Y. Metropolitan
Polytechnic Institute of Brooklyn		
Polytechnic Institute of Brooklyn	Kings	N. Y. Metropolitan
Farmingdale Long Island Branch	Nassau	Long Island
Pratt Institute	Kings	N. Y. Metropolitan
Rennsselaer Polytechnic Institute	Rensselaer	Capital District
Roberts Wesleyan College	Monroe	Rochester
Rochester Institute of Technology	Monroe	Rochester
Rochester, University of	Monroe	Rochester
The Rockefeller Institute	New York	N. Y. Metropolitan
Rosary Hill College		
Rosary Hill College	Erie	Buffalo
Stella Niagara Branch	Niagara	Buffalo
Russell Sage College	Rensselaer	Capital District
St. Bernard's Seminary and College	Monroe	Rochester
St. Bernardine of Siena College	Albany	Capital District
St. Bonaventure University	Cattaraugus	Buffalo
St. Charles Seminary	Richmond	N. Y. Metropolitan
St. Francis College	Kings	N. Y. Metropolitan
St. John Fisher College	Monroe	Rochester
St. John's University	Queens	N. Y. Metropolitan
St. John Vianney Seminary	Erie	Buffalo
St. Joseph's College for Women	Kings	N. Y. Metropolitan
St. Joseph's Seminary and College	Westchester	Rockland-Westchester
(The) St. Lawrence University	St. Lawrence	Northern
St. Pius X Seminary	Putnam	Mid-Hudson
St. Thomas Aquinas College	Rockland	Rockland-Westchester
St. Vladimir's Orthodox Theological Seminary	Westchester	Rockland-Westchester
Sarah Lawrence College	Westchester	Rockland-Westchester
Skidmore College	Saratoga	Capital District

Institutions Classified as Four-Year	County	Planning Region
State University of New York		
State University of New York at Albany	Albany	Capital District
State Univ. of New York at Albany, New Paltz Branch	Ulster	Mid-Hudson
State University of New York at Buffalo	Erie	Buffalo
State University of New York at Stony Brook	Suffolk	Long Island
Downstate Medical Center	Kings	N. Y. Metropolitan
Upstate Medical Center	Onondaga	Syracuse
Graduate School of Public Affairs	Albany	Capital District
College at Brockport	Monroe	Rochester
College at Buffalo	Erie	Buffalo
College at Cortland	Cortland	Syracuse
College at Fredonia	Chautauqua	Buffalo
College at Geneseo	Livingston	Rochester
College at New Paltz	Ulster	Mid-Hudson
College at Oneonta	Otsego	Binghamton
College at Oswego	Oswego	Syracuse
College at Plattsburgh	Clinton	Northern
College at Potsdam	St. Lawrence	Northern
Harpur College	Broome	Binghamton
College of Forestry at Syracuse University	Onondaga	Syracuse
Maritime College	Bronx	N. Y. Metropolitan
College of Ceramics at Alfred University	Allegany	Elmira
College of Agriculture at Cornell University	Tompkins	Elmira
College of Home Economics at Cornell University	Tompkins	Elmira
School of Industrial and Labor Relations at Cornell University	Tompkins	Elmira
Veterinary College, Cornell University	Tompkins	Elmira
Syracuse University		
Syracuse University	Onondaga	Syracuse
Syracuse University-Utica College	Oneida	Mohawk Valley
Chautauqua Center of Syracuse University	Chautauqua	Buffalo
Poughkeepsie-Kingston College of Syracuse Univ.	Ulster	Mid-Hudson
Griffiss Air Force Base Center of Syracuse Univ.	Oneida	Mohawk Valley
Endicott-Owego Center of Syracuse University	Broome	Binghamton
Union Theological Seminary		
Union Theological Seminary	New York	N. Y. Metropolitan
Auburn Theological Seminary*	New York	N. Y. Metropolitan
Union University		
Union University (Union College)	Schenectady	Capital District
Union University-Albany College of Pharmacy	Albany	Capital District
Union University-Albany Law School	Albany	Capital District
Union University-Albany Medical College	Albany	Capital District
Vassar College	Dutchess	Mid-Hudson
Wagner College	Richmond	N. Y. Metropolitan
Webb Institute of Naval Architecture	Nassau	Long Island
Wells College	Cayuga	Syracuse
Yeshiva University	New York	N. Y. Metropolitan

Institutions Classified as Two-Year	County	Planning Region
Academy of Aeronautics	Queens	N. Y. Metropolitan
Adirondack Community College	Washington	Capital District
Auburn Community College	Cayuga	Syracuse
Bennett College	Dutchess	Mid-Hudson
Briarcliff College	Westchester	Rockland-Westchester
Broome Technical Community College	Broome	Binghamton
Buffalo Diocesan Preparatory Seminary	Erie	Buffalo
Catherine McAuley College	Monroe	Rochester
Cazenovia College	Madison	Syracuse
City University of New York		
Bronx Community College	Bronx	N. Y. Metropolitan
Borough of Manhattan Community College	New York	N. Y. Metropolitan
Kingsborough Community College	Kings	N. Y. Metropolitan
New York City Community College of Applied Arts and Sciences	Kings	N. Y. Metropolitan
Queensborough Community College	Queens	N. Y. Metropolitan
Staten Island Community College	Richmond	N. Y. Metropolitan
College of the Holy Names	Albany	Capital District
Concordia Collegiate Institute	Westchester	Rockland-Westchester
Corning Community College	Steuben	Elmira
Dutchess Community College	Dutchess	Mid-Hudson
Elizabeth Seton College	Westchester	Rockland-Westchester
Epiphany Apostolic College	Orange	Mid-Hudson
Erie County Technical Institute	Erie	Buffalo

Institutions Classified as Two-Year	County	Planning Region
Eymard Preparatory Seminary	Dutchess	Mid-Hudson
Fashion Institute of Technology	New York	N. Y. Metropolitan
Fulton-Montgomery Community College	Fulton	Mohawk Valley
Hillside Hall	Rensselaer	Capital District
Hudson Valley Community College	Rensselaer	Capital District
Immaculata College	Erie	Buffalo
Jamestown Community College	Chautauqua	Buffalo
Jefferson Community College	Jefferson	Northern
LaSalette Seminary	Albany	Capital District
Maria College of Albany	Albany	Capital District
Maria Regina College	Onondaga	Syracuse
Mater Christi Seminary	Albany	Capital District
Mater Dei College	St. Lawrence	Northern
Mohawk Valley Community College	Oneida	Mohawk Valley
Monroe Community College	Monroe	Rochester
Nassau Community College	Nassau	Long Island
Niagara County Community College	Niagara	Buffalo
Onondaga Community College	Onondaga	Syracuse
Orange County Community College	Orange	Mid-Hudson
Our Lady of Hope Mission Seminary	Orange	Mid-Hudson
Packer Collegiate Institute	Kings	N. Y. Metropolitan
Paul Smith's College of Arts and Sciences	Franklin	Northern
Presentation Jr. College of the Sacred Heart	Orange	Mid-Hudson
Queen of the Apostles College	Orange	Mid-Hudson
Rockland Community College	Rockland	Rockland-Westchester
Russell Sage College		
Albany Junior College	Albany	Capital District
Saint Clare College	Erie	Buffalo
St. Joseph Seraphic Seminary	Sullivan	Mid-Hudson
St. Pius X Preparatory Seminary of the Diocese of Rockville Centre	Nassau	Long Island
Sancta Maria Junior College	Erie	Buffalo
State University of New York		
Agricultural and Technical College at Alfred	Allegany	Elmira
Agricultural and Technical College at Canton	St. Lawrence	Northern
Agricultural and Technical College at Cobleskill	Schoharie	Capital District
Agricultural and Technical College at Delhi	Delaware	Binghamton
Agricultural and Technical College at Farmingdale	Nassau	Long Island
Agricultural and Technical College at Morrisville	Madison	Syracuse
Suffolk County Community College	Suffolk	Long Island
Sullivan County Community College	Sullivan	Mid-Hudson
Ulster County Community College	Ulster	Mid-Hudson
Villa Maria College of Buffalo	Erie	Buffalo
Voorhees Technical Institute	New York	N. Y. Metropolitan
Wadhams Hall	St. Lawrence	Northern
Westchester Community College	Westchester	Rockland-Westchester
William H. Miner Agricultural Research Institute	Clinton	Northern

[1] In addition, charters have been issued to boards of control with main offices in New York, to establish and maintain institutions abroad; for example, American University of Beirut, Lebanon; Athens College, Greece; Bar Ilan, Israel; Beirut College for Women, Lebanon; and Robert College, Turkey.

* Institutions which have a corporate board operating within a larger corporation

APPENDIX D

REGIONAL AND COUNTY LISTING OF COLLEGES AND UNIVERSITIES

BINGHAMTON

Broome	Baptist Bible Seminary	Private, 4-year
	Broome Technical Community College	Community College
	Endicott-Owego Center of Syracuse University	Private, 4-year
	Harpur College (SUNY)	Public, 4-year
Delaware	Agricultural and Technical Institute at Delhi (SUNY)	Public, 2-year (State)
Otsego	Hartwick College	Private, 4-year
	College at Oneonta (SUNY)	Public, 4-year

BUFFALO

Cattaraugus	St. Bonaventure University	Private, 4-year
Chautauqua	Chautauqua Center of Syracuse University	Private, 4-year
	College at Fredonia (SUNY)	Public, 4-year
	Jamestown Community College	Community College
Erie	Buffalo Bible Institute	Private, 4-year
	College at Buffalo (SUNY)	Public, 4-year
	Buffalo Diocesan Preparatory Seminary	Private, 2-year
	University at Buffalo (SUNY)	Public, 4-year
	Canisius College	Private, 4-year
	D'Youville College	Private, 4-year
	Erie County Technical Institute	Community College
	Immaculata College	Private, 2-year
	Mount St. Joseph College	Private, 4-year
	Rosary Hill College	Private, 4-year
	Saint Clare College	Private, 2-year
	St. John Vianney Seminary	Private, 4-year
	Sancta Maria Junior College	Private, 2-year
	Villa Maria College of Buffalo	Private, 2-year
Niagara	Niagara County Community College	Community College
	Niagara University	Private, 4-year
	Stella Niagara Branch (Rosary Hill College)	Private, 2-year

CAPITAL DISTRICT

Albany	Albany College of Pharmacy (Union University)	Private, 4-year
	Albany Law School (Union University)	Private, 4-year
	Albany Medical College (Union University)	Private, 4-year
	College of the Holy Names	Private, 2-year
	College of Saint Rose	Private, 4-year
	College of Saint Rose, Town of Colonie Branch	Private, 2-year
	Graduate School of Public Affairs (SUNY)	Public, 4-year
	LaSalette Seminary	Private, 2-year
	Manhattanville College of the Sacred Heart, Albany Branch	Private, 4-year
	Maria College of Albany	Private, 2-year
	Mater Christi Seminary	Private, 2-year

	Our Lady of Angels Seminary (Niagara University)	Private, 4-year
	St. Bernardine of Siena College	Private, 4-year
	State University of New York at Albany (SUNY)	Public, 4-year
	Russell Sage College, Albany Junior College Division	Private, 2-year
Rensselaer		
	Hillside Hall	Private, 2-year
	Hudson Valley Community College	Community College
	Immaculate Conception Seminary at Troy	Private, 4-year
	Rensselaer Polytechnic Institute	Private, 4-year
	Russell Sage College	Private, 4-year
Saratoga		
	Skidmore College	Private, 4-year
Schenectady		
	Union College of Union University	Private, 4-year
Schoharie		
	Agricultural and Technical Institute at Cobleskill (SUNY)	Public, 2-year (State)
Washington		
	Adirondack Community College	Community College

ELMIRA

Allegany		
	Agricultural and Technical Institute at Alfred (SUNY)	Public, 2-year (State)
	Alfred University	Private, 4-year
	College of Ceramics at Alfred University (SUNY)	Public, 4-year
	Houghton College	Private, 4-year
Chemung		
	Elmira College	Private, 4-year
Steuben		
	Corning Community College	Community College
Tompkins		
	College of Agriculture at Cornell University (SUNY)	Public, 4-year
	College of Home Economics at Cornell University (SUNY)	Public, 4-year
	Cornell University	Private, 4-year
	Ithaca College	Private, 4-year
	School of Industrial and Labor Relations at Cornell University (SUNY)	Public, 4-year
	Veterinary College, Cornell University (SUNY)	Public, 4-year

LONG ISLAND

Nassau		
	Adelphi University	Private, 4-year
	Agricultural and Technical Institute at Farmingdale (SUNY)	Public, 2-year (State)
	George Mercer, Jr. Memorial School of Theology	Private, 4-year
	Hofstra University	Private, 4-year
	Nassau Community College	Community College
	Molloy Catholic College for Women	Private, 4-year
	New York Institute of Technology, Westbury Branch	Private, 4-year
	Polytechnic Institute of Brooklyn, Farmingdale, Long Island Branch	Private, 4-year
	C. W. Post College (Long Island University)	Private, 4-year

	St. Pius X Preparatory Seminary of the Diocese of Rockville Centre	Private, 2-year
	Webb Institute of Naval Architecture	Private, 4-year
Suffolk	Brentwood College	Private, 4-year
	Lloyd Harbor, Huntington, L. I. Campus, Cathedral College of the Immaculate Conception	Private, 4-year
	Southampton College (Long Island University)	Private, 4-year
	State University of New York at Stony Brook	Public, 4-year
	Suffolk College (Adelphi University)	Private, 4-year
	Suffolk County Community College	Community College

MID-HUDSON

Dutchess	Bard College	Private, 4-year
	Bennett College	Private, 2-year
	Dutchess Community College	Community College
	Eymard Preparatory Seminary	Private, 2-year
	Marist College	Private, 4-year
	Vassar College	Private, 4-year
Orange	Epiphany Apostolic College	Private, 2-year
	Ladycliff College	Private, 4-year
	Mount Saint Mary College	Private, 4-year
	Orange County Community College	Community College
	Our Lady of Hope Mission Seminary	Private, 2-year
	Presentation Junior College of the Sacred Heart	Private, 2-year
	Queen of the Apostles College	Private, 2-year
Putnam	St. Pius X Seminary	Private, 4-year
Sullivan	St. Joseph Seraphic Seminary	Private, 2-year
	Sullivan County Community College	Community College
Ulster	College at New Paltz (SUNY)	Public, 4-year
	Mount St. Alphonsus Seminary of Esopus, New York	Private, 4-year
	Poughkeepsie-Kingston College of Syracuse University	Private, 4-year
	State University of New York at Albany, New Paltz Branch	Public, 4-year
	Ulster County Community College	Community College

MOHAWK VALLEY

Fulton	Fulton-Montgomery Community College	Community College
Herkimer	Holy Trinity Orthodox Seminary	Private, 4-year
Oneida	Griffiss Air Force Base Center of Syracuse University	Private, 4-year
	Hamilton College	Private, 4-year
	Mohawk Valley Community College	Community College
	Utica College (Syracuse University)	Private, 4-year

NEW YORK METROPOLITAN

Bronx	Bronx Community College (CUNY)	Community College
	College of Mount Saint Vincent	Private, 4-year
	Fordham University	Private, 4-year

	Juilliard School of Music	Private, 4-year
	Manhattan College	Private, 4-year
	Maritime College (SUNY)	Public, 4-year
Kings	Brooklyn College (CUNY)	Public, 4-year
	Brooklyn College of Pharmacy (Long Island University)	Private, 4-year
	Brooklyn Law School	Private, 4-year
	Cathedral College of the Immaculate Conception	Private, 4-year
	Downstate Medical Center (SUNY)	Public, 4-year
	Kingsborough Community College (CUNY)	Community College
	Long Island University—University Center	Private, 4-year
	New York City Community College for Applied Arts and Sciences (CUNY)	Community College
	Packer Collegiate Institute	Private, 2-year
	Polytechnic Institute of Brooklyn	Private, 4-year
	Pratt Institute	Private, 4-year
	St. Francis College	Private, 4-year
	St. Joseph's College for Women	Private, 4-year
New York	Auburn Theological Seminary (Union Theological Seminary)	Private, 4-year
	Bank Street College of Education	Private, 4-year
	Barnard College (Columbia University)	Private, 4-year
	Biblical Seminary in New York	Private, 4-year
	Borough of Manhattan Community College	Community College
	City College (CUNY)	Public, 4-year
	College of Insurance (The)	Private, 4-year
	College of Pharmacy (Columbia University)	Private, 4-year
	Columbia University	Private, 4-year
	Cooper Union for the Advancement of Science and Art	Private, 4-year
	Cornell Medical College (Cornell University)	Private, 4-year
	Fashion Institute of Technology	Community College
	Finch College	Private, 4-year
	General Theological Seminary of the Protestant Episcopal Church	Private, 4-year
	Graduate Studies Division (CUNY)	Public, 4-year
	Hebrew Union College-Jewish Institute of Religion	Private, 4-year
	Hunter College (CUNY)	Public, 4-year
	Institute of Public Administration	Private, 4-year
	Jewish Theological Seminary of America	Private, 4-year
	M. J. Lewi College of Podiatry	Private, 4-year
	Manhattan School of Music	Private, 4-year
	Mannes College of Music	Private, 4-year
	Marymount Manhattan College	Private, 4-year
	Mills College of Education	Private, 4-year
	New School of Social Research	Private, 4-year
	New York College of Music	Private, 4-year
	New York Institute of Technology	Private, 4-year
	New York Law School	Private, 4-year
	New York Medical College	Private, 4-year
	New York University	Private, 4-year
	Pace College	Private, 4-year
	The Rockefeller Institute	Private, 4-year
	Teachers College (Columbia University)	Private, 4-year
	Union Theological Seminary	Private, 4-year
	Voorhees Technical Institute	Private, 2-year
	Yeshiva University	Private, 4-year

Queens	Academy of Aeronautics	Private, 2-year
	(The) Passionist Monastic Seminary	Private, 4-year
	St. John's University	Private, 4-year
	Queens College (CUNY)	Public, 4-year
	Queensborough Community College (CUNY)	Community College
Richmond	Notre Dame College of Staten Island	Private, 4-year
	St. Charles Seminary	Private, 4-year
	Staten Island Community College	Community College
	Wagner College	Private, 4-year

NORTHERN

Clinton	College at Plattsburgh (SUNY)	Public, 4-year
	William H. Miner Agricultural Research Institute	Private, 2-year
Franklin	Paul Smith's College of Arts and Sciences	Private, 2-year
Jefferson	Jefferson Community College	Community College
St. Lawrence	Agricultural and Technical Institute at Canton (SUNY)	Public, 2-year (State)
	Clarkson, Thomas S. Memorial College of Technology	Private, 4-year
	College at Potsdam (SUNY)	Public, 4-year
	Mater Dei College	Private, 2-year
	St. Lawrence University (The)	Private, 4-year
	Wadhams Hall	Private, 2-year

ROCHESTER

Livingston	College at Geneseo (SUNY)		Public, 4-year
	Divine Word Seminary		Private, 4-year
Monroe	Catherine McAuley College		Private, 2-year
	Colgate Rochester Divinity School		Private, 4-year
	College at Brockport (SUNY)		Public, 4-year
	Monroe Community College		Community College
	Nazareth College		Private, 4-year
	Roberts Wesleyan College		Private, 4-year
	Rochester Institute of Technology		Private, 4-year
	St. Bernard's Seminary and College		Private, 4-year
	St. John Fisher College		Private, 4-year
	University of Rochester		Private, 4-year
Ontario	Hobart College	Colleges of the Seneca	Private, 4-year
	William Smith College		Private, 4-year
Yates	Keuka College		Private, 4-year

ROCKLAND-WESTCHESTER

Rockland	Dominican College of Blauvelt	Private, 4-year
	Nyack Missionary College	Private, 4-year
	Rockland Community College	Community College
	St. Thomas Aquinas College	Private, 4-year
Westchester	Briarcliff College	Private, 2-year
	College of New Rochelle	Private, 4-year

	Concordia Collegiate Institute	Private, 2-year
	Elizabeth Seton College	Private, 2-year
	Good Counsel College	Private, 4-year
	Iona College	Private, 4-year
	King's College (The)	Private, 4-year
	Manhattanville College of the Sacred Heart	Private, 4-year
	Maryknoll Seminary	Private, 4-year
	Marymount College	Private, 4-year
	Mary Rogers College	Private, 4-year
	Mercy College	Private, 4-year
	Pleasantville Institutional Branch (Pace College)	Private, 2-year
	St. Joseph's Seminary and College	Private, 4-year
	St. Vladimir's Orthodox Theological Seminary	Private, 4-year
	Sarah Lawrence College	Private, 4-year
	Westchester Community College	Community College

SYRACUSE

Cayuga		
	Auburn Community College	Community College
	Wells College	Private, 4-year
Cortland		
	College at Cortland (SUNY)	Public, 4-year
Madison		
	Agricultural and Technical Institute at Morrisville	Public, 2-year (State)
	Cazenovia College	Private, 2-year
	Colgate University	Private, 4-year
Onondaga		
	College of Forestry at Syracuse University (SUNY)	Public, 4-year
	LeMoyne College	Private, 4-year
	Maria Regina College	Private, 2-year
	Onondaga Community College	CommunityCollege
	Syracuse University	Private, 4-year
	Upstate Medical Center (SUNY)	Public, 4-year
Oswego		
	College at Oswego (SUNY)	Public, 4-year

APPENDIX E

SELECTED INFORMATION ON NEW YORK STATE COLLEGES AND UNIVERSITIES

TABLE 15—Higher Educational Institutions in New York State by Type of Control and Length of Programs, 1963-64*

Classification		Number
Private		
4-year or more		132
2-year		35
Total Private		167
Public		
4-year or more		
State University		25
City University		5
Total 4-year		30
2-year		
State University Agricultural & Technical Colleges		6
Community Colleges		
In New York City	7	
Other	21	
Total Community Colleges		28
Total 2-year		34
Total Public		64
State Total		231

* Includes main campuses and recognized institutional branches

TABLE 16—Number and Highest Level of Offering of Higher Educational Institutions in Six States and in the United States, 1963-64

Area	Total Colleges	Highest Level of Offering				
		I	II	III	IV	V[a]
United States	2,139	644	792	455	223	25
New York	187*	57	52	47	29	2
California	174	74	41	45	12	2
Pennsylvania	130	17	63	33	15	2
Illinois	114	32	38	30	12	2
Massachusetts	100	27	28	28	14	3
Texas	98	39	22	24	13	—

[a] I—2-year; II—Bachelor's degree and first professional degree only; III—Master's and/or second professional degree; IV—Doctor's or equivalent degree; V—other special purpose.

* Currently the Board of Regents recognizes 231 main campuses and institutional branches, some of which have been developed since these data were compiled. The discrepancy is also due in part to the difference in criteria used in classifications.

SOURCE: Office of Education, **Education Directory, Part 3, Higher Education, 1963-64.**

TABLE 17

FULL-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION PRELIMINARY SURVEY—FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	5,103	128,224	133,327	9,666	16,764	3,099	162,856
Two-year	4,316		4,316			111	4,427
Total Private	9,419	128,224	137,643	9,666	16,764	3,210	167,283
Public							
SUNY							
Four-year	397	46,507	46,904	2,133	2,823	692	52,552
Ag. and Tech.	7,719		7,719			66	7,785
Community	31,229		31,229			735	31,964
Total SUNY	39,345	46,507	85,852	2,133	2,823	1,493	92,301
CUNY	948	38,773	39,721		579	185	40,485
Total Public	40,293	85,280	125,573	2,133	3,402	1,678	132,786
Total Four-year	6,448	213,504	219,952	11,799	20,166	3,976	255,893
Total Two-year	43,264		43,264			912	44,176
State Total	49,712	213,504	263,216	11,799	20,166	4,888	300,069

NOTE:—This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 899 full-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 18

PART-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION PRELIMINARY SURVEY—FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	2,289	24,055	26,344	1,617	39,959	34,498	102,418
Two-year	350		350			434	784
Total Private	2,639	24,055	26,694	1,617	39,959	34,932	103,202
Public							
SUNY							
Four-year	8	6,016	6,024	5	4,896	4,295	15,220
Ag. and Tech.	149		149			2,458	2,607
Community	14,510		14,510			24,956	39,466
Total SUNY	14,667	6,016	20,683	5	4,896	31,709	57,293
CUNY	8,031	8,229	16,260		12,560	32,981	61,801
Total Public	22,698	14,245	36,943	5	17,456	64,690	119,094
Total Four-year	10,328	38,300	48,628	1,622	57,415	71,774	179,439
Total Two-year	15,009		15,009			27,848	42,857
State Total	25,337	38,300	63,637	1,622	57,415	99,622	222,296

NOTE:—This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 37,455 part-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 19

FULL- AND PART-TIME DEGREE-CREDIT ENROLLMENT BY DEGREE LEVEL AND TYPE OF INSTITUTION PRELIMINARY SURVEY — FALL 1964

Kind of Institution	Undergraduate			First Professional	Graduate	Non-matriculated	Grand Total
	Associate	4 & 5 Year Bachelor's	Total				
Private							
Four-year	7,392	152,279	159,671	11,283	56,723	37,597	265,274
Two-year	4,666		4,666			545	5,211
Total Private	12,058	152,279	164,337	11,283	56,723	38,142	270,485
Public							
SUNY							
Four-year	405	52,523	52,928	2,138	7,719	4,987	67,772
Ag. and Tech.	7,868		7,868			2,524	10,392
Community	45,739		45,739			25,691	71,430
Total SUNY	54,012	52,523	106,535	2,138	7,719	33,202	149,594
CUNY	8,979	47,002	55,981		13,139	33,166	102,286
Total Public	62,991	99,525	162,516	2,138	20,858	66,368	251,880
Total Four-year	16,776	251,804	268,580	13,421	77,581	75,750	435,332
Total Two-year	58,273		58,273			28,760	87,033
State Total	75,049	251,804	326,853	13,421	77,581	104,510	522,365

NOTE:—This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 38,354 full- and part-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 20

COMPARISON OF DEGREE-CREDIT ENROLLMENTS FALL 1963 AND FALL 1964*

Kind of Institution	Enrollment						Percent Change 1963-1964		
	Full-time		Part-time		Total				
	1963	1964	1963	1964	1963	1964	Full-time	Part-time	Total
Private									
Four-year	151,921	162,856	97,778	102,418	249,699	265,274	7.2%	4.7%	6.2%
Two-year	3,851	4,427	755	784	4,606	5,211	15.0	3.8	13.1
Total Private	155,772	167,283	98,533	103,202	254,305	270,485	7.4	4.7	6.4
Public									
SUNY									
Four-year	46,128	52,552	13,379	15,220	59,507	67,772	13.9	13.8	13.9
Ag. and Tech.	6,518	7,785	2,119	2,607	8,637	10,392	19.4	23.0	20.3
Community	23,827	31,964	31,353	39,466	55,180	71,430	34.2	25.9	29.4
Total SUNY	76,473	92,301	46,851	57,293	123,324	149,594	20.7	22.3	21.3
CUNY	37,393	40,485	55,860	61,801	93,253	102,286	8.3	10.6	9.7
Total Public	113,866	132,786	102,711	119,094	216,577	251,880	16.6	16.0	16.3
Total Four-year	235,442	255,893	167,017	179,439	402,459	435,332	8.7	7.4	8.2
Total Two-year	34,196	44,176	34,227	42,857	68,423	87,033	29.2	25.2	27.2
State Total	269,638	300,069	201,244	222,296	470,882	522,365	11.3	10.5	10.9

* Preliminary data for Fall 1964.

NOTE:—This table does not include enrollments reported as "nondegree-credit." In fall 1963 there were 38,354 full- and part-time nondegree-credit students reported by the colleges and universities of New York State.

TABLE 21

Selected Comparative Data, Private and Public Institutions

Item	Private		Public					Total
	4 Year	2 Year	4 Year			2 Year		
			CUNY	SUNY		A & T	Comm. Colleges	
				Contract Colleges	All Other			
Value of Physical Plant, 1962-63	$ 1.3 bil.[a]	$56.6 mil.	$79.8 mil.	[a]	$353.0 mil.	$40.1 mil.	$64.3 mil.	$ 1.9 bil.
Educational and General Expenditures, 1961-62	$490.4 mil.[a]		$53.9 mil.	[a]	$57.6 mil.		$18.1 mil.	$620.0 mil.
Faculty, Fall 1963 Full Time	13,250	300	2,611	587	3,702	414	1,439	22,303
Part Time	11,388	224	2,348	0	289	17	197	14,463
Total	24,638	524	4,959	587	3,991	431	1,636	36,766
Enrollment, Fall 1963 Full Time	152,099	3,902	37,673	4,712	41,726	6,550	23,815	270,477
Part Time	118,281	807	66,898	73	14,958	4,119	34,507	239,643
Total	270,380	4,709	104,571	4,785	56,684	10,669	58,322	510,120

[a] Data for contract colleges included with data for 4 year private institutions.

APPENDIX F

NEW YORK STATE BOARD OF REGENTS POLICY STATEMENT ON THE COMPREHENSIVE COMMUNITY COLLEGE

A comprehensive community college has a unique role to play in public higher education. The demands of society on postsecondary education are heavy and increasing both in the numbers to be served and the range of opportunities to be provided. The State of New York is fortunate to have 25 community colleges now in operation and 3 more authorized for development. The Board of Regents commends both the local sponsoring agencies and the Board of Trustees of State University of New York, under whose general supervision the community colleges are created and operate, for this record of accomplishment.

In the past, the Board of Regents has issued several statements stressing the important role of the 2-year colleges in the total structure of public education in the State. An essential step in the formulation of the Regents' statewide plan for higher education in 1964 is a re-emphasis and an amplification of the Board's views on the critical educational function to be performed by comprehensive community colleges. Therefore, the Board of Regents endorses the following propositions:

I — Comprehensive community colleges should be recognized and supported as the basic institutional approach to providing a broader public educational opportunity above the high school level in New York State.

II — These institutions should be open to all high school graduates or persons with equivalent educational background, operated at low cost to the students, and located within reasonable daily commuting distance of the students' places of residence.

III — The comprehensive community colleges should be expected to perform the following specific educational functions:

A. *General Education.* To provide post-secondary-school general background and experience for all students in conjunction with study in their major academic fields.

B. *College or University Transfer Education.* To provide the requisite courses for 2 years of collegiate study for students who are interested and competent to carry their studies to the bachelor's degree.

C. *Occupational or Terminal Education.* To provide programs of education and training beyond the high school, but below the professional level, for students seeking, for whatever reason, immediate entry into the productive labor force in business, industry, or government organizations in need of employees with higher level abilities; and for persons already employed but seeking to improve or learn new skills required in our changing economic and cultural environment.

D. *Adult or Continuing Education.* To provide programs of continuing education appropriate to and consistent with the level immediately above the high school in the educational system to assist adults of all ages to meet changing educational, cultural, and economic conditions and to implement changes in their personal objectives.

E. *Guidance and Counseling.* To provide for all students the necessary testing, guidance, and counseling to enable each one to know and accept his strengths and limitations and to choose the program most suited to him in the light of objective information and his personal situation at the time.

IV — Two-year and four-year colleges, in a planned, coordinated, and complete system of public higher education, provide essential and complementary, but distinctive, services in post-high-school education. Therefore, existing 2-year colleges should not be converted to 4-year baccalaureate college status as an approach to the expansion of college programs in any region in the State.

V — Serious consideration should be given by the Board of Trustees of State University of New York and the Board of Higher Education of The City University of New York to the establishment of institutions which begin at the usual junior year of collegiate study and offer 2-year or 3-year programs leading to the bachelor's and/or higher degrees. These should be placed in locations where long-range plans of these universities, as approved by the Board of Regents under its statewide obligation, conclude that additional public programs leading to the bachelor's and/or higher degrees are needed.

VI — Consideration should be given by the Board of Trustees of State University of New York and the Board of Higher Education of The City University of New York in their 1964 Master Plans to formulating an admissions policy that recognizes the different educational functions of comprehensive community colleges and of baccalaureate degree-granting institutions and to moving as rapidly as possible toward a program of "open door" admissions of high school graduates to community colleges.

VII — Two-year and four-year colleges, public and private, should devote greater attention to the cooperative development of transfer arrangements to the end that students who complete community college transfer programs may be assured of ample opportunity to complete their educational objectives.

APPENDIX G

RESIDENCE AND MIGRATION OF COLLEGE STUDENTS IN NEW YORK STATE, FALL 1963

TABLE 22

NET MIGRATION IN AND OUT OF NEW YORK STATE
SELECTED CATEGORIES
FALL 1963

Category	Number of "Out of State" Residents Attending College in New York State (1)	Number of New York State Residents Attending College Outside New York State (2)	Net Migration In and Out of New York State (1)-(2)
Grand Total, All Students*	55,953	92,185	—36,232
Undergraduate, Total*	36,961	76,371	—39,410
First Professional	4,089	5,400	— 1,311
Graduate	14,903	10,414	+ 4,489

* Excludes part-time undergraduate students in the State University of New York.

TABLE 23

INTER- AND INTRA-STATE MIGRATION TO NEW YORK STATE COLLEGES AND UNIVERSITIES
FULL-TIME UNDERGRADUATE STUDENTS
FALL 1963

Type of Institution	Number of Students in New York State Schools	Percent of Students Who Are Residents of				Number of New York State Residents in New York State Schools	Percent of New York Residents Residing in		
		Border States*	Other States	Foreign Including Territories	New York State		County Wherein the College is Located **	Economic Area Wherein the College is Located	All Other Counties
4-year or more									
Private	128,241	15.9%	6.2%	2.1%	75.8%	97,244	50.1%	4.8%	45.1%
Public									
CUNY	36,899	+	+	0.2	99.8	36,838	95.4	—	4.6
SUNY									
Univ. Ctrs.	13,249	1.8	0.3	0.7	97.2	12,881	38.7	11.9	49.4
Med. Ctrs.	57	5.3	1.7	+	93.0	53	47.2	11.3	41.5
Univ. Cols.	23,926	0.6	0.1	0.5	98.8	23,640	22.0	14.9	63.1
Contract Cols.	3,438	8.2	4.3	3.0	84.5	2,905	5.7	5.4	88.9
Other	1,358	10.1	2.0	1.0	86.9	1,180	32.1	2.5	65.4
Total 4-year or more	207,168	10.2	3.9	1.5	84.4	174,741	54.2	5.6	40.2
2-year									
Private	3,776	25.8	12.3	2.1	59.8	2,256	38.8	10.7	50.5
Public									
Ag. and Tech.	6,492	3.5	0.4	1.2	94.9	6,159	23.7	21.0	55.3
N.Y.C. Comm. Cols.	6,696	4.2	0.9	1.7	93.2	6,243	90.8	—	9.2
Other Comm. Cols.	16,929	1.9	0.1	0.3	97.7	16,548	69.7	17.8	12.5
Total 2-year	33,893	5.3	1.7	0.9	92.1	31,206	62.7	14.3	23.0
Total Private	132,017	16.1	6.4	2.1	75.4	99,500	49.9	4.9	45.2
Total Public	109,044	1.5	0.3	0.6	97.6	106,447	60.7	8.9	30.4
State Total	241,061	9.5	3.6	1.4	85.5	205,947	55.4	7.0	37.6

* Includes Connecticut, Massachusetts, New Jersey, Ohio, Pennsylvania and Vermont.
** The 5 boroughs of New York City were treated as one county for this report.
+ Less than 0.1 percent.

TABLE 24

INTER- AND INTRA-STATE MIGRATION TO NEW YORK STATE COLLEGES AND UNIVERSITIES
FIRST-TIME FRESHMEN
FALL 1963

Type of Institution	Number of Students in New York State Schools	Percent of Students Who Are Residents of				Number of New York State Residents in New York State Schools	Percent of New York Residents Residing in		
		Border States*	Other States	Foreign Including Territories	New York State		County Wherein the College is Located	Economic Area Wherein the College is Located	All Other Counties
4-year or more									
Private	39,914	15.4%	5.9%	1.6%	77.1%	30,750	54.4%	4.3%	41.3%
Public									
CUNY	11,031	0.3	+	+	99.7	10,994	97.1	—	2.9
SUNY									
Univ. Ctrs.	3,657	0.7	0.3	0.6	98.4	3,601	36.1	11.2	52.7
Med. Ctrs.									
Univ. Cols.	7,101	0.4	0.1	0.2	99.3	7,046	17.2	13.7	69.1
Contract Cols.	888	7.8	3.6	2.6	86.0	764	4.8	5.1	90.1
Other	400	13.5	1.8	0.5	84.2	337	29.7	2.4	67.9
Total 4-year or more	62,991	10.1	3.8	1.1	85.0	53,492	56.2	5.1	38.7
2-year									
Private	2,011	26.3	14.0	1.7	58.0	1,164	31.5	14.1	54.5
Public									
Ag. and Tech.	3,603	3.4	0.4	0.5	95.7	3,448	23.2	21.0	55.8
N.Y.C. Comm. Cols.	3,057	4.3	0.5	0.7	94.5	2,891	90.4	—	9.6
Other Comm. Cols.	8,147	1.7	0.1	0.2	98.0	8,004	70.5	17.8	11.8
Total 2-year	16,836	5.5	1.9	0.5	92.1	15,507	60.7	14.9	24.4
Total Private	41,925	15.9	6.3	1.6	76.2	31,914	53.6	4.6	41.8
Total Public	37,902	1.6	0.3	0.3	97.8	37,085	60.3	9.6	30.1
State Total	79,827	9.1	3.4	1.0	86.5	68,999	57.2	7.3	35.5

* Includes Connecticut, Massachusetts, New Jersey, Ohio, Pennsylvania, and Vermont.
+ Less than 0.1 percent
** The 5 boroughs of New York City were treated as one county for this report.

TABLE 25

NET MIGRATION BY ECONOMIC AREA WITHIN NEW YORK STATE
FULL-TIME UNDERGRADUATE STUDENTS
FALL 1963

Economic Area	*In Migration* Number of "Out of Area" Residents Attending College in "This Area" (1)	*Out Migration* Number of Residents of "This Area" Attending College "Out of Area" (2)	Net Migration (1)-(2)
Binghamton	4,734	2,931	+ 1,803
Buffalo	6,614	5,068	+ 1,546
Capital District	6,609	4,387	+ 2,222
Elmira	10,909	2,597	+ 8,312
Mid-Hudson	3,350	4,355	— 1,005
Mohawk Valley	1,069	4,924	— 3,855
New York Metropolitan			
New York City	14,332	13,333	+ 999
Nassau-Suffolk	2,802	18,802	— 16,000
Rockland-Westchester	3,466	9,166	— 5,700
Northern	5,318	2,096	+ 3,222
Rochester	6,046	6,087	— 41
Syracuse	12,186	3,689	+ 8,497

TABLE 26

INTRA-STATE MIGRATION MATRIX BY ECONOMIC AREA
FULL-TIME UNDERGRADUATE STUDENTS
FALL 1963

Location of College Attended (Economic Area)	Bing-hamton	Buffalo	Capital District	Elmira	Mid-Hudson	Mohawk Valley	New York Metropolitan			Northern	Rochester	Syracuse	Total
							New York City	Nassau-Suffolk	Rockland-Westchester				
Binghamton	1,742	219	519	273	450	325	836	1,179	350	94	227	262	6,476
Buffalo	282	14,520	444	448	276	401	999	1,066	381	246	1,478	593	21.134
Capital District	426	410	5,663	225	1,002	823	822	1,092	643	327	457	382	12,272
Elmira	536	1,379	711	2,429	571	390	2,065	1,688	927	275	1,593	774	13,338
Mid-Hudson	65	74	205	25	3,415	73	1,239	906	612	25	68	58	6,765
Mohawk Valley	105	99	95	37	47	563	40	89	51	109	138	259	1,632
New York Metropolitan													
New York City	147	183	294	60	579	120	73,491	8,569	4,067	83	136	94	87,823
Nassau-Suffolk	15	27	50	13	92	29	2,318	9,088	199	19	25	15	11,890
Rockland-Westchester	40	71	129	30	115	49	2,409	459	3,161	31	60	73	6,627
Northern	249	424	788	178	334	530	322	950	392	2,181	586	565	7,499
Rochester	297	1,272	407	633	288	380	670	833	396	256	6,514	614	12,560
Syracuse	769	910	745	675	601	1,804	1,613	1,971	1,148	631	1,319	5,745	17,931
Total	4,673	19,588	10,050	5,026	7,770	5,487	86,824	27,890	12,327	4,277	12,601	9,434	205,947

APPENDIX H

SPECIAL STUDIES PROJECTED AS A BASIS FOR FUTURE PLANNING

1. Analysis of Fiscal Procedures and Per-student Costs in Institutions of Higher Learning in New York State
2. Role and Scope of Member Higher Educational Institutions of the University of the State of New York
3. Costs Incurred by Students Attending Special-purpose Schools in New York State
4. Costs Incurred by Students Enrolling in Particular Occupational Programs in New York State
5. A Feasibility Study for a High-capacity Computer Facility
6. The Place of City University of New York Within the Existing Education Law
7. Intra-state Residence and Migration of College Students, 1965
8. Survey of College-going Aspirations of High School Seniors and Patterns of Entrance into College
9. Retention, Withdrawal, and Follow-up of College Students in New York State Colleges and Universities
10. Inventory of Resources and Centers for Providing Doctoral and Post-doctoral Programs in Science, Engineering, Technology, and in Selected Fields of Social Sciences and the Humanities

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1967
PROGRESS REPORT
of the
BOARD OF REGENTS
on
The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

1784

The University of the State of New York
The State Education Department
Albany, New York 12224

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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1967
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1784

The University of the State of New York
The State Education Department
Albany, New York 12224

THE UNIVERSITY OF THE STATE OF NEW YORK

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1970	*Everett J. Penny, B.C.S., D.C.S., Vice Chancellor*	*White Plains*
1978	*Alexander J. Allan, Jr., LL.D., Litt.D.*	*Troy*
1973	*Charles W. Millard, Jr., A.B., LL.D.*	*Buffalo*
1972	*Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S.*	*Purchase*
1975	*Edward M. M. Warburg, B.S., L.H.D.*	*New York*
1969	*Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D.*	*New York*
1977	*Joseph T. King, A.B., LL.B.*	*Queens*
1974	*Joseph C. Indelicato, M.D.*	*Brooklyn*
1976	*Mrs. Helen B. Power, A.B., Litt.D.*	*Rochester*
1979	*Francis W. McGinley, B.S., LL.B.*	*Glens Falls*
1981	*George D. Weinstein, LL.B.*	*Hempstead*
1980	*Max J. Rubin, LL.B., L.H.D.*	*New York*
1971	*Kenneth B. Clark, A.B., M.S., Ph.D.*	*Hastings-on-Hudson*
1982	*Stephen K. Bailey, A.B., B.A., M.A., Ph.D., LL.D.*	*Syracuse*

President of the University and Commissioner of Education
James E. Allen, Jr.

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THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
JAMES E. ALLEN, JR., PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

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EDGAR W. COUPER
FIRST-CITY NATIONAL BANK
BOX 1109
BINGHAMTON, NEW YORK 13902

December 1, 1967

The Honorable Nelson A. Rockefeller
Governor
Executive Chamber
State Capitol
Albany, New York

Dear Governor Rockefeller:

In accordance with Section 237, Subdivision 4, of the Education Law, I am pleased to submit the 1967 Progress Report on the Regents Statewide Plan for the Expansion and Development of Higher Education.

The Regents are aware of the progress being made by institutions of higher learning in meeting the needs of our people. The Regents believe careful planning is the basic element in the accomplishment of those tasks still to be completed in higher education.

In this report the Regents have proposed the way in which their own role may contribute to the development of educational opportunity and they have commented on some of the specific areas where noteworthy progress has taken place. The recommendations of the State and City Universities have been carefully reviewed and comments and actions by the Regents are set forth.

I commend this report to you for your consideration.

Respectfully yours,

E. W. Couper

E. W. Couper
Chancellor

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SUMMARY

1967 PROGRESS REPORT
OF
THE BOARD OF REGENTS

SUMMARY

REGENTS 1967 PROGRESS REPORT ON HIGHER EDUCATION

PART I - PROGRESS REPORT OF THE BOARD OF REGENTS

INTRODUCTION

The Regents of the University of the State of New York are accepting an obligation to be increasingly active in the field of higher education. A major part of this obligation lies in coordination of statewide efforts: by developing state-wide goals, determining the relationship between the needs of the individual and society, and by encouraging cooperative efforts among institutions. The Regents will establish guidelines for the formation of new institutions, and evaluate the Plans submitted by State University and City University, and planning information from the private institutions.

ENLARGEMENT OF OPPORTUNITY

Equality of Opportunity

Although many factors serve to encourage or inhibit college attendance, it is reasonable to assume that a major factor is the financial condition of the prospective student and his family. The existing scholarship program has been inadequate in that full recognition has not been given to the total educational costs borne by the student. The new scholarship policy adopted by the Regents would establish a system of universal aid based on financial need that would emphasize the total cost of higher education, i.e., instructional material and maintenance as well as tuition. In addition, a new program of Regents Opportunity Scholarships for earlier identification and encouragement of disadvantaged students of high potential has been proposed.

Disadvantaged Students

Because of the complexity of this subject, the Regents one year ago requested that a study be undertaken by the Office of Higher Education of the State Education Department. This study, entitled a Report on a

Master Plan for Post-Secondary Educational Opportunity for the Disadvantaged is now well underway and will be forthcoming in December of 1967. The Regents reserve comment on such an important topic until this report can be fully weighed and its recommendations considered.

Private Higher Education Developments

Early in the year the Governor and the Board of Regents appointed a Select Committee on Higher Education under the leadership of Mr. McGeorge Bundy to investigate the special problems confronting private higher education institutions and to submit recommendations for action intended to preserve their continuing growth.

The private institutions have recognized the importance of exercising a collective spokesmanship and marshalling their resources effectively in relationship to one another and to the public institutions in such a way as to serve the educational needs of the State. The Commission on Independent Colleges has implemented this recognition by appointing Dr. Francis Horn as the first full-time President.

MANPOWER

There are particular manpower shortages in various fields, including nursing and health related positions, library science, engineering, and accounting. In order to meet these and other shortages, a wide range of programs will need to be developed, including different kinds of categorical aid to encourage persons to study and enter these occupations. In addition, there would be practical value in the establishing of a list of priorities in critical areas, in order to direct specific attention to them. The Regents also support the idea of an Inter-agency Manpower Council to coordinate State efforts to reduce shortages.

Graduate Education

In accord with the 1966 Progress Report, a study of the status, plans, and needs of graduate education at the doctoral level has been undertaken. The study, still in process, has taken the form of defining the scope of graduate education in the State, of establishing projections of doctoral output, and of analyzing the migration patterns of new doctorates by subject area.

The projections of doctoral output indicate that the numbers of doctoral degrees awarded in New York State in 1975 will be approximately twice the number awarded in 1966.

Faculty Supply and Demand

Analysis of data derived from studies of faculty supply and demand indicate that the number of qualified faculty is increasing at a rate which is sufficient to meet the growing needs of higher education in the aggregate. However, there are now marked shortages in selected fields and these can be expected to extend into the future. An additional factor which may lead to selected shortages is the current trend of the larger and multipurpose type institutions, both public and private, being more successful in recruiting and retaining faculty with the doctorate than the smaller and undergraduate oriented institutions.

Faculty Salaries

Faculty salaries during the academic year 1966-67 were, on the average, 8 percent higher than salaries paid during 1965-66. Although the smaller colleges shared in this increase, their competitive position, in terms of salary, was not strengthened.

Supply of Teachers for Elementary and Secondary Schools

The expanding role of education in our society, coupled with projected increases in enrollment at both the elementary and secondary levels, will result in an increased demand for teachers. This increased demand may accentuate shortages in several areas, such as the teaching of the handicapped and the culturally disadvantaged.

The problem of assessing the supply of teachers required to meet the increased demand is complex, and involves the analysis of many factors, such as certification requirements and replacement rates. These and additional related factors will be the subject of a study of teacher supply to be conducted during the coming year.

STUDENT POPULATION

Enrollment Growth

In the fall of 1966, more than 600,000 students were enrolled in New York State colleges and universities. The full-time enrollment in degree credit courses continued to grow, reaching a new high of 365,437. This represented an increase of 8 percent over the 1965 figure, an increase that was shared by all groups of institutions. In terms of 2-year and 4-year institutions, the numerical increase was greater in the latter although the rate of growth was greater in the former.

The full-time enrollment will increase to a minimum of 458,000 students by 1970. It is probable and quite possible, assuming changes in migration patterns, that the figure will increase to 480,000 by 1970 and to 628,000 by 1975. It is recommended that these figures be used for planning purposes. More detailed and refined projections are needed for planning in higher education. In recognition of this need the State Education Department has a study currently underway to develop a computer model for projecting enrollments on a statewide and regional basis.

Applications for Admission

In 1967 applications increased at both public and private institutions as compared with 1966. Private institutions noted a modest increase but public institutions increased at a rate similar to that experienced during the past decade. Among private institutions during the past five years, applications to coeducational institutions showed a greater increase than applications to single sex colleges.

An extensive study of the high school class of 1966 showed that 8 percent of college applicants from the top half of the class were not admitted to any higher education institution and 25 percent in the top half made no application to college. An indepth study will be made this year and reported in the 1968 Plan.

SPECIAL SERVICES

State Library System

The State Education Department's Library Reference and Research Resources Program, called the "3-R's," is concerned with providing access to the information resources of the entire State as preserved in its libraries, both public and private. Through this program the Department is developing the use of electronic devices in the acquisition, management, and retrieval of information materials. The systems now being designed will be applicable in any research library and will be made freely available. In addition a facsimile transmission network has been established, linking 13 major libraries in the State with the State Library.

Continuing Education

As society's common body of knowledge increases, new roles appear and traditional occupational positions are made obsolete. This requires that in addition to the long established obligations to provide formal programs for college-age youth, greater attention must be given by educational leaders to provide adequate opportunities for all adults to continue their education to meet changing conditions. The Office of Higher Education and the Division of Continuing Education are now formulating a position paper on continuing education.

International Education

The Department Center for International Programs and Services is concerned with developing programs to emphasize the increased importance of the non-Western areas to our primarily Anglo-European society. One such program is the Educational Resources Center in New Delhi, India. Another program that has just marked the completion of its first year of operation is the Carnegie-supported Neglected Languages Program. Under this program a student enrolled in any college in New York State may study independently a language not usually available in the local curriculums.

COLLEGE AND UNIVERSITY FACILITIES

Financing of facilities increasingly has involved reliance on public funds. The allocation on a national basis of $4 million per year of Federal money over a three-year period will permit analysis of facilities plans and requirements. This project will permit the collection and analyses of data which will permit detailed studies of facilities trends, projections, and sources of financing on a comparable basis among institutions.

Because of the huge sums involved there should be a major study during the coming year of the space projection factors used to develop facilities requirements at the State and City Universities.

Private Colleges and Universities - Facilities Planning

The estimated facility expenditures of the private institutions for the next five-year period are nearly doubled the facilities expenditures for the last five-year period. However, during the next five-year period the increase in full-time enrollment at the private institutions will be approximately half the increase of the previous five-year period. A comparison of the diminishing enrollment growth with the doubling of capital expenditures raises some questions.

Sources of Money

Bonds recently issued by the State University Construction Fund and the Dormitory Authority show steadily increasing interest costs. The increased cost of such bonds and the magnitude of construction plans of both public and private institutions suggest that a definitive study should be made to determine the ability of these institutions to continue to finance facilities in this manner, since these bonds are repaid through first call on tuition and student fees.

State University of New York - Facilities Planning

The 1967 Development Plan of State University accompanying the Master Plan indicates that $1.3 billion will be called for in capital facilities expenditures during the next five years. It is understood that the facilities research division of the Office of Architecture and Facilities is now establishing evaluative processes to refine projection techniques. The latest information contained in the 1967 Progress Report of the State University, with regard to individual campuses and buildings, does not make it possible to evaluate or comment upon the adequacy of facilities in relation to objectives.

City University of New York - Facilities Planning

The City University Construction Fund will aid in implementing the construction process and provide an improved basis of campuses and facilities. An example of this is the undertaking by City University officials of studies to develop factors for the projection of space needs. The Regents approve certain City University facilities recommendations and authorize planning funds to develop others and permit more detailed consideration at a later date.

PART II - STATE UNIVERSITY 1967 INTERIM REVISION - THE REGENT'S REVIEW

INTRODUCTION

The Interim Revision reflects the progress of State University, which has increased its enrollment by almost 12,000 from the fall of 1965 to the fall of 1966. Facilities have expanded to accommodate the increased number of students. Such growth as this carries with it problems of many kinds, in the face of which the progress is even more impressive.

COMMENTARY ON RECOMMENDATIONS

Enrollments
(#9)

State University's revised enrollment planning goal in 1975 is 290,400 students. This figure assumes an increase in the college input rate plus a change in migration patterns of students attending out-of-state public colleges, as well as an increased number of graduate students in proportion to undergraduates. This revised planning goal is approved.

Two-Year Colleges
(#'s 43-48)

In meeting the goal of postsecondary educational opportunity for every qualified applicant, the community and technical colleges will play a rapidly expanding role. The range of programs offered will have to be wide enough to meet the diverse needs of the growing number of students. Regional programming may be one of the most important areas of planning in the development of these colleges.

State University reaffirms that no 2-year public college shall be expanded to a 4-year college in order to maintain the growing strength of the community college system.

Community Colleges for the Olean-Cattaraugus region, Schenectady County, and Saratoga County have been proposed, but no action is being taken by the Regents on those for Olean-Cattaraugus or Saratoga. The Schenectady County proposal, while approved by the Regents, requires a planning review to avoid undue competition with colleges already operating in the area.

In regard to multiple-campus Community Colleges, the Regents will review the needs for branch campuses, as well as for newly initiated colleges.

The Regents support State University's program of Urban Centers, which are of great importance in the education of the disadvantaged.

The Agricultural and Technical Colleges which offer programs of subtechnical and vocational training are recognized as filling a need in providing educational opportunity for all, but before programs will be approved, there must be an assurance of consultation between secondary and higher education authorities, in order to avoid costly duplication.

The University Colleges
(#'s 51-53)

As the impressive list of faculty appointments indicated, these institutions are achieving new stature as multipurpose institutions.

Preliminary planning is mentioned dealing with establishment of an upper-division college in the Herkimer-Rome-Utica area, but no information is provided by State University and no Regents action can be taken.

The University Colleges, in their transition from teacher-training institutes, are quickly developing strong programs in the liberal arts and sciences. In keeping with the study on teacher supply and demand that the Regents have undertaken, the role of the University Colleges in preparing such teachers will be reviewed.

State University stresses the importance of offering continuing opportunity to those who graduate from the two-year schools; actual needs in this area will have to be carefully measured.

Specialized and Statutory Colleges
(#55,56)

The relationship of these colleges to State University and to other colleges in the State is a continuing area of study but Regents action will have to be deferred until specific reports are received.

The University Centers
(#60)

Distinguished faculty appointments, with increasing research activities, scholarly publications, and public service all mark the development of these institutions.

The Regents have approved establishment of a new School of Architecture at Buffalo, a School of Nursing at Albany, and Schools of Nursing and Business Administration at Binghamton.

A School of Advanced Technology at Binghamton is approved in part, i.e., the establishment of graduate programs in computer sciences and applied mathematics. The approval of graduate engineering courses and programs has been deferred until further study can provide answers to questions which still remain.

Libraries
(#'s 23-26)

The Library section of the State University Interim Revision projects an ambitious growth which would eventually comprise a combined collection of all units to exceed 15 million volumes. It is questioned whether the various units of State University each need to be self-sufficient, since a sophisticated communications network is also being developed. It is suggested that State University and the Education Department's Library Reference and Research Resources Program might be less independent of each other in the formation of a bibliographic system. An alternative formula for judging the present adequacy of academic libraries and on which projections of institutional growth can be based is proposed in lieu of the formula developed by State University. The variations between the results of the application of the two formulas need to be evaluated before action can be taken.

Educational Communications
(#28)

State University, in cooperation with City University, is offering a series of basic freshman and sophomore courses on television through the University of the Air program. This will be carried by the New York Network, an interconnection of the independent educational television stations in New York State. Programs in training communications specialists are also recommended, in keeping with the increasing use of communications technology in education.

PART III - CITY UNIVERSITY 1967 INTERIM REVISION - THE REGENTS REVIEW

INTRODUCTION

The City University Construction Fund and State and City financial support for the operating budget enabled City University to move forward in meeting problems of increased enrollment, needed facilities, and new and special programs for the disadvantaged.

Academic Program Development and Emphasis

Two new colleges in the City University are opening this fall and it is urged that future reports give detailed information concerning their development.

The growth of doctoral programs, especially in education, is commended and encouraged, as are programs for the preparation of teachers for the schools.

Community Colleges, in an area with the complex economic, social, and cultural life of New York City, are encouraged. As with State University, however, evidence of consultation with secondary school authorities will be necessary before approval can be given to programs which might be duplicated in the high schools.

Medical Education

An affiliation of City University and the Mt. Sinai School of Medicine will bring together the very considerable resources of the two institutions, and is approved by the Regents. The establishment of a Health Careers Center is also encouraged, to help fill the manpower shortages which exist in health-related areas.

Services for the Disadvantaged

Programs for both high school students and graduates have been established. An effort is being made to seek out potential qualified college applicants at the ninth grade level; a program called "College Discovery" assists high school graduates in gaining admittance to the community college; a special program, "SEEK", made it possible to enroll over 1200 students from poverty areas in the City.

Libraries

Libraries at 16 locations within the City University are all steadily growing, but it is recommended that plans dealing with undergraduate library need be more specific. It is recommended that the four major units join in cooperative book selection and purchasing. In addition the need for cooperative effort with the State Library's Reference and Research Library program is emphasized.

Evening Division, Continuing Education and Summer Session Programs

Since the population to be served is so large in the area of City University, it is recommended that objectives dealing with part-time and adult education be developed through pilot programs in order to develop bases for growth projections.

Faculty and Staff Development

City University's realization of the importance of conditions which facilitate teaching, research, and professional growth as well as salaries, working conditions, and benefits in the development of a strong faculty is commended.

Enrollment Goals and Policies

City University has made sound progress in expanding enrollments. One quarter of the New York City high school students who graduated in June 1966 received offers of admission from the City University. On the basis of increased retention rates, enrollment projections are being revised upwards.

Relationships to Other Institutions

Increased cooperative efforts are urged between City University, State University, and the private institutions in order to meet the urgent educational needs of the people of the State.

PART I

1967
PROGRESS REPORT OF THE BOARD OF REGENTS
ON
THE REGENTS STATEWIDE PLAN FOR THE EXPANSION AND DEVELOPMENT OF HIGHER EDUCATION, 1964

REGENTS 1967 PROGRESS REPORT

PART I

INTRODUCTION

This Progress Report on higher education is submitted by the Regents of the University of the State of New York in accord with their responsibility under the Education Law to review, consider approval for the reports of progress and modification of the Master Plans of the State and City University, and to provide a progress statement on the Statewide Plan of the Regents as submitted in 1964.

Although the year past has been marked by achievement in every sector of higher education in the State, the most notable change has been one of attitude of the people of the State giving recognition to the increased attention that must be directed to the orderly development of higher education in the interest of the individual and of society. This attitude has grown out of the problems of the time, out of the recognition given to the important work of the Select Committee on Private Higher Education appointed last fall by the Governor and Regents, and by the attention given to higher education during the deliberations of the Constitutional Convention.

The Regents are aware of their obligation to play a constructive role in relation to the development of educational opportunity at all levels and in all parts of the State. At the same time, they accept a responsibility to review proposals in relation to available resources in such a manner that growth will not be accompanied by undue duplication or inefficiency. This calls for a concept of planning and active coordination of all educational resources in a way that is more ambitious than has been characteristic of higher education in the past. The concept is a difficult one because the nature of higher education demands that there be freedom to create, to grow, to initiate, and there needs to be flexibility for development in the classroom, on the campus, and in a university system. The reconciliation of coordination as against freedom to grow and change will require continuing attention and a considerable degree of statesmanship. In carrying out this responsibility the Regents accept an obligation to:

1) develop goals for higher education on a statewide basis
2) determine educational need in relation to the requirements of individuals and society with particular reference to studies of manpower
3) propose contractual arrangements between the Board of Regents and educational institutions for the development of programs in areas of critical State need. Such contracts to be administered under the supervision of the Board of Regents
4) propose educational developments on a regional basis in relation to:
    a) number of students
    b) programs suited to their interests and needs

    c) requirements for adult and continuing education
    d) educational services to the community including service courses and extension programs of particular interest to industry
    e) educational programs particularly suited to the resources and requirements of a region due to current requirements or traditional programs

5) make a detailed planning review of proposals to establish new institutions, merge with existing institutions, undertake educational operations on a new or different campus, or add new degree programs. Criteria or guidelines setting forth the steps to be followed and the information to be furnished are being developed by the Education Department following consultation with representatives of public and private institutions and will be promulgated by the Regents in the near future.
6) determine or evaluate in gross financial terms, proposals for educational developments included in Master Plans of the State University, the City University, and planning information from the private institutions in order to assess alternatives for providing educational services.

The adoption and application of such guidelines will represent a higher degree of formal involvement in planning and coordinating the development of private and public institutions. It is the Regents responsibility to see that this rich resource which these institutions collectively constitute is used most wisely for the expansion and development of higher education in the State. In carrying out this responsibility, it is necessary that the private institutions as well as the State University of New York and the City University of New York submit plans which shall be subject to review and recommendation by the State Education Department.

In connection with the development of professional schools under public or private auspices, the Education Department under the guidance of the Associate Commissioner for Higher and Professional Education and with the participation of the Assistant Commissioner for Professional Education, will consider such proposals in relation to the needs of the profession and the public and the plans of existing institutions. The Regents' responsibility in the professional fields is a heavy one.

In operating a policy aimed at coordination, procedures should be established to obtain participation of representatives of private and public institutions. The policies and practices should be reviewed in terms of changing patterns of financial support for higher education and increasing pressures calling for the utilization of all educational resources in an integrated manner in order to meet growing educational requirements.

General Progress

The year past has been marked by a realization of many of the goals set forth in the 1964 Regents Statewide Plan and also by a growing awareness of many difficult problems to which increasing attention must be directed. The Regents renew their commitment to promote the health and strength of all institutions of higher learning.

During the early years of this decade the concern for higher education found expression in quantitative terms, usually enrollment growth, in order to accommodate a dramatic increase in the college age population due to the high birth rate after World War II. This tended to obscure the growing interdependence of higher education and society for mutual well-being. A society that is ever more technologically oriented has placed heavy demands upon the system for the preparation of its skilled and professional manpower, and the development of new knowledge which in turn has resulted in new products, new services, and new demands. In addition, the total population asks for continual preparation in order to cope with the problems of modern living. In performing these educational services the colleges and universities have expanded their mission in every dimension, at the same time incurring demands for resources which may strain their capacity to maintain the rate of growth or to achieve the objectives already set forth. It becomes increasingly obvious that the accelerating rate of social change demands more and better planning on the part of all associated with higher education.

ENLARGEMENT OF OPPORTUNITY

During the past year certain major topics received the special attention of the Regents and they deserve mention in this report.

Equality of Opportunity

Although many factors serve to encourage or inhibit college attendance, it can probably be assumed that the largest single element is the financial condition of the prospective student and his family. For decades New York State has provided national leadership in terms of scholarship programs to assist students in continuing their education. Indeed, New York's expenditures for scholarships, fellowships, and scholar incentive awards in the fiscal year 1966-67 ($66.5 million) surpassed those of all other states in the Union combined.

Monumental though this effort has been, it has not been enough to make equal opportunity for higher education fully available to all citizens. The scholarship program has been inadequate in that a full recognition has not been given to the total cost of education which extends beyond tuition to such things as instructional materials, commuting or residential expenses, and maintenance for the student. For those persons of college age of economically deprived status, the absence of financial assistance in such ambitious terms meant that no opportunity for higher education was available.

In an attempt to promote this ideal, the Regents, in August, proposed that there be established a new approach to financial assistance, a system of universal aid based on need. Assistance might range in 1968 to a maximum of $1,000 a year, based on economic status as compared to the present figure of $500.* This maximum would be increased progressively

*Freedom to Pursue a College Education, Recommendations by the State Board of Regents for Modifying and Extending New York State's Student Financial Aid Program. Albany, New York August 1967.

until, by 1975, each student would receive as much assistance as he would require, to enable him to meet the full cost of tuition at the college of his choice, private or public, in New York State, and also include fees, books, and an allowance for food, housing, and other expenses directly related to his education. The student and his family would be expected to contribute to the costs of college attendance in accordance with an established scale based on family income.

In addition to the enlarged scholar incentive awards, a new program of Regents Opportunity Scholarships for earlier identification and encouragement of disadvantaged students of high potential is proposed. Until such time as the Scholar Incentive Program has been fully implemented, it is recommended that special "opportunity" scholarships be awarded each year to 2,000 tenth grade students from low income families. Such scholarships, the Regents believe would provide effective motivation for study during the high school years by giving these students early assurances of scholarship benefits upon graduation if they maintain satisfactory progress.

Under the State's present program of student financial aid, student awards during 1968 will cost $74 million. By 1975, based on anticipated enrollment increases alone, this figure will rise to $92 million. If the Regents proposals are adopted, it is estimated that student aid will total $90 million in 1968 and $250 million by 1975.

Disadvantaged Students

The question of providing adequate educational opportunity for the disadvantaged has been and is one of prime concern to the State. The recent study of student financial aid, as well as statements by the Regents, the Governor, and the Commissioner of Education all point to the high priority of this item. It is evident that the common goal is to afford the opportunity for satisfactory and worthwhile postsecondary experience to every student of sufficient ability regardless of his financial or educational disadvantages.

Because of the urgency and complexity of this subject, the Regents one year ago requested that a study be undertaken by the Division of Higher Education of the State Education Department. This study, entitled "A Report on a Master Plan for Post-Secondary Educational Opportunity for the Disadvantaged," is now well underway and will be forthcoming in December of 1967. The Regents reserve comment on such an important topic until this report can be fully weighed and its recommendations considered.

Private Higher Education Developments

At the beginning of this decade a committee entitled Committee on Higher Education under the chairmanship of Dr. Henry Heald put forth a series of recommendations including several dealing with the urgency of a significant strengthening of the public system of higher education in the State. Those objectives are being achieved, as the reports of the State and City University systems attest. It is vital that the resources and other forms of support continue to be made available.

New York is perhaps unique among the states in the position of special importance occupied by private colleges and universities in educating its citizenry and providing a wide range of services. These institutions for over 200 years have constituted a resource of incalculable value in the public interest. The greater demand being placed upon them and the accelerating costs of higher education have generated critical problems that demand attention if the health of this sector is to be maintained and the complementary partnership between public and private institutions is to be preserved. Early in the current calendar year the Regents enthusiastically joined with Governor Rockefeller in the appointment of a Select Committee on Higher Education under the distinguished leadership of Mr. McGeorge Bundy to investigate the special problems confronting these institutions and submit recommendations for action intended to preserve their continuing growth.

The report of the Committee is expected early in 1968 and should be worthy of the most careful consideration by all persons interested in higher education on both state and national levels. It may well provide a basis for subsequent proposals for action submitted by the Regents to the Governor and the Legislature and will be treated in detail in the 1968 Regents Statewide Plan for the Expansion and Development of Higher Education.

The private institutions have recognized the importance of a collective spokesmanship and of marshalling their resources effectively in relationship to one another and to the public institutions. A major step forward has been taken during the past year in the appointment of Dr. Francis Horn as President of the Commission on Independent Colleges. As his work proceeds into patterns of planning and educational programming, the benefits can be expected to accrue for the entire educational community, leading to a better realization of the ideal of a University of the State of New York in which the State and City Universities and the private institutions react more and more closely one with another.

MANPOWER

Manpower projections should be both detailed and precise but the unceasing flux of forces in a free society often compels both generalization and impression. It is unrealistic to expect an exact and comprehensive correlation between educational planning and the actual manpower needs of the future. It is, nevertheless, important that all planning agencies in higher education base their recommendations and policies upon the most precise data obtainable. Imprecision should not be compounded.

It is also important that responses be made to manpower shortages in relation to their specific causes. In some fields there is an evident need for training facilities, funding, and qualified instructional staff. In other fields the problem is less one of facilities than of incentive to enter the profession. In some occupations a key to the alleviation of shortages lies in both decreasing high turnover rates in jobs of trained personnel and in bringing many back to these jobs after a hiatus in employment. Hence, one critical problem in the resolution of manpower needs is that of motivation. Material incentives are important, of course, but mitigation of shortages also involves changes in the more subtle realms of "status" and "image."

As a crucial first step in the definition of manpower needs in New York State, a special Governor's Committee on Manpower published a survey of the supply and demand for personnel in seven selected fields of clear shortage and made recommendations for the alleviation of unmet needs. The fields of analysis were civil engineering, accounting, occupational therapy, social work, library science, and nursing. Analysis focused on needs within the State service, but several of the analyses made estimates of total need in the State. The discussion of civil engineering, concentrating on needs within the State government alone, cited a need for 540 civil engineers, 850 civil engineering technicians, and 115 civil engineering draftsmen. The analysis of accounting needs also focused on governmental needs; it indicated that there were over 700 vacancies in budgeted positions in State service in 1966. There was an estimated shortage of 1,560 occupational therapists in the State in 1965 and a 50 percent shortage of occupational therapists in State agencies alone; in 1970 there may be 3,400 unfilled positions in the State. In the field of social work, 313 out of 710 social work positions in the State Department of Mental Hygiene were vacant, and the number of vacancies is expected to increase in that agency. In the State as a whole there will be an estimated deficit of over 2,000 social workers by 1970. In the field of librarianship, there was a shortage of at least 1,000 skilled persons in 1966, and the need is expected to increase by 55 percent between 1965 and 1970. In the critical field of nursing the report cited 7,665 vacancies in budgeted nursing positions in 1963 and at least 135 unfilled faculty positions in nursing schools in 1966.

The question of matching society's need for skilled personnel, possessing different kinds of training, with the supply available from the formal programs of the colleges, universities and the other sources that contribute to the pool, is a complex matter. The special committee appointed by the Governor to study the problem proposed that steps be taken to develop greater coordination among agencies of State government in meeting these needs. During the past year the Regents and the State Education Department in cooperation with other agencies have been active in the matter of manpower resources.

The Office of Science and Technology, in the State Education Department proposed by the Regents in their 1964 Plan for Higher Education, began operations in February, 1967. The Office will assist in efforts to increase the number and quality of specialized personnel for science and technology, particular attention being given to programs at the doctoral and technician level. State surveys have been initiated to provide information on current facilities, personnel, and programs in higher education for teaching and research in the basic sciences and in engineering. This information will be of assistance in developing desirable and feasible long-range statewide objectives and methods of meeting these objectives. The Office will also assist in improving liaison with local, regional, state, national, and international groups looking toward cooperative projects.

In certain fields there already has been change in accordance with the recommendations of the Manpower Subcommittees. Perhaps most dramatic is the Regents adoption of a program to help meet the need for nurses and the partial implementation of that program through a series of new laws and administrative initiatives. State contracts or financial support will now be given to private colleges and universities and to hospital diploma schools to provide for expanded nursing programs. State contracts will aid in providing refresher courses for inactive nurses returning to the field, and support will be given to an increasing number of licensed practical nurse programs. College proficiency exams in nursing are being developed. Fellowships will be given to graduate nursing students preparing for teaching and administrative positions, and intensified assistance will be given to guidance counselors concerning educational and career opportunities in nursing. The Office of Health Affairs Planning for State University, the Office of the Dean for Academic Development of City University, and the Office of Nurse Education in the State Education Department continue to work cooperatively in the initiation and development of Associate and Baccalaureate degree nursing programs.

In the field of occupational therapy, in line with the specific recommendations of the Manpower Subcommittee, the Department of Mental Hygiene is establishing a career ladder system whereby personnel can work up from the subprofessional to the professional positions within the Department. In the realm of stimulating greater entrance into the profession, the City University of New York is studying the feasibility of establishing programs in occupational therapy, and the State University has begun programs at two of its units which are designed to increase the supply of occupational therapists by training practitioners to become teachers, particularly in the 2-year colleges.

The special need for manpower resources is particularly critical in these health related positions. As a State, New York faces a special deficiency in the case of preparation for the practice of optometry. No institution in New York has specialized in this kind of preparation since Columbia University terminated its program in 1956. With a population the size of New York's this deficiency should be promptly remedied. The two public university systems have been studying this problem and should now meet to develop plans for action.

In the field of library science, a Commissioner's Committee on Library Development was established in 1967 to study and make recommendations on the future needs of libraries (presumably) including manpower needs. In addition, a detailed study is now being made of present and projected staffing needs, of the motivation and mobility characteristics of librarians in New York State and of the use of existing financial aids to students in library science. These data are now being analyzed and will serve as a basis for additional recommendations.

In the field of civil engineering several steps have been taken to facilitate recruitment into the State Service. For example, the written test for junior engineers has been eliminated as a prerequisite for employment. Engineering aides are no longer required to have taken geometry and trigonometry before employment; they may acquire knowledge of these subjects through inservice training. The Departments of Public Works and Health have undertaken a program of visits to 2-year colleges to recruit personnel with appropriate training.

In the field of accounting, too, the requirements for employment by the State have been made more flexible as a means of reducing vacancies. The Department of Civil Service has eliminated the written test as a prerequisite for eligibility for employment. The baccalaureate degree plus a major in accounting now creates a condition of eligibility. This will enhance recruitment directly on college campuses. The Department of Civil Service is also preparing a career booklet on accounting opportunities in the State Service as a recruiting aid.

It is clear that there should be a continuing assessment of present and projected manpower demands in each of these fields and that the actions now being taken be re-evaluated and adjusted in terms of these reassessments. After considering several of the studies that have been made during the past year, it is concluded that:

1) Support should be extended to the establishment of an interagency manpower council as recommended by the Governor's special committee.

2) There would be practical value in establishing a priority list of critical areas of manpower shortage in order to direct specific attention to areas of need.

3) A wide range of programs will need to be developed in areas of shortage including different kinds of categorical aid to encourage persons to study and enter occupations in shortage areas.

Graduate Education

In accord with the directive in the 1966 Regents Report on the Master Plan, the Education Department has undertaken a study of the status, plans, and needs of graduate education at the doctoral level in New York State. The study, still in process, thus far has taken the form of defining the scope of graduate education in the State, of establishing projections by doctoral output, of analyzing the migration patterns of new doctorates by subject area both in and out of New York State, and of establishing for New York State the occupational choices of new doctorates by subject area.

Doctoral output (exclusive of first professional degrees) in New York State is projected to rise from an estimated 2,150 in 1966-67 to 4,461 in 1975-76 to 5,767 in 1980-81 at the present rate of increase of bachelors and first professional degrees. Subject areas will grow at differing rates. For example, if present trends continue, mathematics doctorates which accounted for 4.3 percent of all New York State doctorates in 1966-67, by 1980-81 will account for an estimated 5.7 percent; engineering doctorates will jump from 10.9 percent of all doctorates in 1966-67 to 16.3 percent in 1980-81; physical sciences will proportionately decline from 13.5 percent to 10.1 percent. These varying subject area growth rates in New York State in general conform to the growth rates projected by the U. S. Office of Education for the United States.

Projections of doctoral output have been made by each graduate institution in the State.* The total of these estimates conforms roughly to the aggregate projection cited above. However, the rates of expansion vary widely among the institutions, ranging from minimal increase in doctoral output up to a five-fold increase in the period between 1966-67 and 1975-76.

In the period 1920-61 approximately 13 percent of those who received the doctorate in the United States took their baccalaureate degree in New York State.** New York has a high pool of talent available at the baccalaureate level for graduate study. If additional resources for graduate study were available in the State, a higher portion of this pool of talent might logically be expected to remain in-state from baccalaureate to doctoral degree. A progressively declining percent of New York State baccalaureates has, however, been remaining in New York State for the doctorate. In 1920-29 approximately 66 percent of the New York State baccalaureates who received the doctorate anywhere in the United States received it in New York State, but in 1960-61 only 48 percent remained in New York State. In contrast, over the same period California and Michigan retained about the same percents (63 percent and 48 percent respectively), Massachusetts declined only from 43 percent to 40 percent and Pennsylvania increased from 37 percent to 42 percent.***

New York State is also a net supplier of doctorates to the rest of the United States. In the period 1960-66, 6,460 doctorates from New York institutions took their first postdoctoral job outside of New York State, while 3,928 new doctorates from institutions in other states took their first job in New York State. But this position of net "surplus" probably has been declining as the rate of doctoral degree output in the State has been increasing at a significantly slower rate than in the nation as a whole. Moreover, while the State has been a net exporter of new doctorates in significant numbers in the occupational areas of education and government, it has been a net importer of new doctorates in industry in most subject areas.

The net migration of new doctorates into or out of the State may be one rough indicator of the supply and demand relationship in selected fields in the State, suggesting areas of relative abundance and shortage. The State was a net importer of new doctorates in first jobs, 1960-66, in electrical engineering (6), health sciences (15), and speech and dramatic arts (31). It was a significant net exporter in physics and astronomy (82), chemistry (51), total engineering (145), total biological sciences (280), psychology (216), sociology (60), economics (103), political science (128), history (103), English (87), fine arts and music (71) and education (935). This migration pattern indicates the supply and demand position of New York State relative to the nation more than it indicates the stated shortages in the various subject areas in the State.*

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* U.S. Office of Education, Higher Education General Information Survey, Schedule 10.

** Data supplied by National Research Council, Office of Scientific Personnel, 1967.

*** National Research Council, Office of Scientific Personnel, 1967.

In addition to the statewide data already collected, the study of graduate education will shortly be directed to assess the particular plans and capabilities of each doctorate granting institution in the State with reference to enrollment, staffing faculties, the financing of graduate students, and the cost of graduate education by broad field. The shape of graduate education thus defined will be set against assessed manpower needs, in order to determine whether New York's needs and resources are in reasonable balance or whether remedial action is required.

Faculty Supply and Demand

The general pattern of college faculty quality remains sufficiently adequate to meet the growing demands of higher education. The percent of full-time teaching staff with the doctorate in 4-year institutions has steadily increased from 52.7 percent in 1958-59 to 58.4 percent in 1965-66. 2-year colleges, in contrast, have maintained an approximate 10 percent to 11 percent of their full-time instructional staff with the doctorate. This is due in large part to the special character of these institutions and their needs for faculty whose technical specialty often precludes an increase of the percentage of doctorates in the faculty.

Projections of faculty demand to 1980-81 indicate that in a general sense there will be an adequate and indeed increasingly qualified supply of college teachers. Because of the observed fluctuations in the birth rate, the percent of full-time enrollment increase in the period up to 1980-81 will at no time equal that of the mid-1960's. For example, in four-year institutions, the estimated annual demand for new full-time faculty to meet enrollment increases is approximately 2,000 for the year 1967-68 and is approximately 1,000 for 1969-70, not projected to rise over 1,200 at any time up to 1980. At the same time the rate of increase in doctoral degrees is projected to rise at a significantly higher rate than undergraduate enrollments, thus providing a net increase in the potential pool of college teachers in relation to enrollments.

There are now marked shortages in selected fields, however, and these can be expected to extend into the future. Among the fields of shortage of college faculty are mathematics, physics, foreign languages, English, sociology, economics, psychology, degree nursing and library science. The apparent shortages are also conditioned by the fact that college teachers in certain fields, such as foreign languages and English, tend to get their doctorate after beginning to teach rather than before. Thus quality (if one equates quality with the doctorate) is "deferred" rather than absolute.

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* National Research Council, Office of Scientific Personnel, 1967.

The larger and multipurpose institutions, both public and private, have been more successful in recruiting and retaining doctorates than have the smaller and undergraduate centered 4-year colleges.

As the expected pattern of college enrollments shifts progressively from private to public and from 4-year to 2-year institutions, so too will the distribution of faculty demand shift. Assuming that student/faculty ratios remain approximately constant, the estimated demand for full-time faculty to meet enrollment increases only in the private sector of higher education will increase by approximately 40.7 percent between 1965 and 1975, while the increase in demand in the total public sector will be about 120 percent. While 4-year institutions, both public and private, will increase in full-time faculty demand by 56 percent. the 2-year colleges will have a 200 percent increase. The estimated faculty increase 1965-75 for all institutions in the State is 74 percent.

A study of geographic and occupational migration patterns of new faculty in the period 1960-66 shows that approximately 55 percent of new doctorates from New York State institutions entered college and university teaching, and 46 percent of this group entered college and university teaching in New York State. Approximately 70 percent of the new full-time faculty in community colleges earned their highest degree in New York State.

These figures on faculty supply and demand have been derived from studies by the New York State Education Department, the U.S. Office of Education, the National Research Council, and the National Education Council, Analysis of data of this sort presently available indicates that there is a sufficient supply of qualified faculty in New York State colleges and universities for the next decade in the aggregate but that there are shortages in some specific fields and institutions.

Faculty Salaries

The salaries paid to faculty members of colleges and universities in New York State during the academic year 1966-67 averaged approximately 8 percent above the salaries paid in 1965-66, according to data published by the American Association of University Professors. This represents a continuation of the improvement of faculty salaries as indicated by the figures in the 1966 Progress Report.

As might be expected, differences in both the average salary and the range of salaries exist among types of institutions. In terms of faculty recruitment, all other things being equal, the data in the AAUP Bulletin reveal that the smaller colleges have not strengthened their competitive position, although their salaries have improved. See Table on College and University Salaries in New York and College and University Compensations in New York in Appendix pages 48 - 51.

Supply of Teachers for the Elementary and Secondary Schools

The expanding role of education in our society, coupled with projected increases in enrollment at both the elementary and secondary levels, will result in an increased demand for teachers. This increased demand may accentuate shortages existing in several areas at the present time. Although solutions have been advanced such as teacher aides and the use of closed circuit television, in the last analysis the critical element in the learning situation remains the individual teacher.

In areas of specialized instruction, such as teaching the handicapped and the culturally disadvantaged, the role of the teacher becomes more critical as the need for individual attention is greater. The increase in numbers coupled with the need for greater specialization will compound the problem of teacher supply. In addition, new organizational relations and structures within the teaching profession are apt to introduce additional factors related to the recruitment, selection, and retention of teachers. The interrelationship of school boards, lay advisory committees, and teachers' organizations will have a direct bearing on teacher supply and demand.

It is essential that there be a careful study of the supply of teachers in relation to the educational needs of society. The matter of supply must be analyzed in terms of graduates of State University, City University, and the private institutions.

Although the problem of teacher turnover in New York State has not been studied in depth, the following information is available from a report of 300 central schools in 1963.* This report showed that on the average, 10.4 percent of the teachers employed in 1962, in the schools studied, did not return to their positions in the fall of 1963. The major reasons given for this turnover are given as follows:

Reason for Turnover	Percent of Total Turnover
Left for other teaching position	27.8
Maternity	14.2
Not rehired	12.8
Retirement	11.5
Spouse transferred	11.4
Further study	7.8

Data from the Department's 1963-64 Professional Personnel Report indicate a statewide turnover rate of 17.0 percent (not including New York City). This includes a retirement rate of 1.2 percent, a leave of absence rate of 1.2 percent, and an "other attrition" rate of 14.6 percent.

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* Teacher Turnover in Central Schools, February, 1964. New York State Education Department.

Assuming this 17 percent turnover rate applies to New York City as well as upstate, a total of 21,990 teachers did not return to their positions in the fall of 1963. According to the National Education Association's Teacher Supply and Demand in Public Schools, 1963, New York State's colleges and universities graduated only 12, 602 students certified for teaching positions within the State. Even if all of these graduates entered the teaching field, there would still be over 9,000 vacancies to be filled to compensate for turnover plus new positions to be filled to compensate for increasing enrollments. These 9,000 + positions could, of course, be filled by people migrating into the State as well as people returning to the profession. Data for the 1964-65 Professional Personnel Report indicate that as many as 6.6 percent of the teaching positions, or approximately 9,000 positions in 1963-64, may have been filled in this manner.

In spite of the problems outlined above, the ratio of professional staff to pupils enrolled in the State's public schools had declined from 30.1 percent in 1955-56 to 24.9 percent in 1964-65. In order to accomplish this, however, it has been necessary for the schools to employ uncertified personnel. In the fall of 1965, for example, 12 percent of the teaching positions upstate were filled by uncertified personnel. Of these positions, 87.7 percent were full-time, for a total of 13,034 full-time teaching positions in upstate New York filled by uncertified teachers.

The emergence of special requirements for teachers may be dramatically illustrated by the problem of staffing classes for the handicapped. The Education Department's statement on Selected Data on Positions Filled by Uncertified Personnel in New York State during the 1965-66 school year reports "that the professional fields with the greatest percentages of positions filled by uncertified persons in 1965-66 were Physically Handicapped (39 percent), Mentally Handicapped (33 percent), Industrial and Technical (32 percent), Library (27 percent) and Speech (23 percent)." A survey of existing facilities for the training of teachers of handicapped children is being conducted by the Bureau of Research in Higher and Professional Education.

No reference is included in the Master Plan Revision of the public universities or known plans of private institutions that takes into consideration that need for teachers in the expanding areas of service to the emotionally disturbed and the brain injured. These are areas in which the pressures of parent organizations and agencies are stimulating the growth of programs. The State Education Department's Division of Handicapped Children estimates that during the next ten years 3,000 teachers of the emotionally disturbed and 1,000 teachers of the brain injured will be needed.

The Regents, therefore, encourage the State Education Department to undertake measures to study and analyze the requirements for teachers, the probable supply to be available, and prepare recommendations intended to provide adequate educational services to be included in proposals in the 1968 Plan for Higher Education.

THE STUDENT POPULATION

Enrollment Growth

In the Fall of 1966, 602,173 full- and part-time students enrolled in degree credit courses compared with 569,716 the previous year. The 1966 full-time enrollment in degree credit courses continued to exhibit growth, reaching a new high of 365,437. This represented an increase of 8 percent over the 1965 figure, an increase shared by all groups of institutions. The numerical increase, 27, 139, was distributed approximately equally between the public and private institutions, the former increasing by 14,101 and the latter by 13, 038. The rate of growth for both types of institutions did display a variation. the public institutions increasing at 9 percent and the private institutions at 7 percent.

Within the public sector, there was also a variation in the growth rates of the City University and the State University of New York. The State University, comprising almost one-third of the total full-time degree credit enrollment, experienced an increase in this type of enrollment of 11 percent as compared to the City University increase of 6 percent. The projected enrollments in public and private institutions are shown in Chart 1 on page 15.

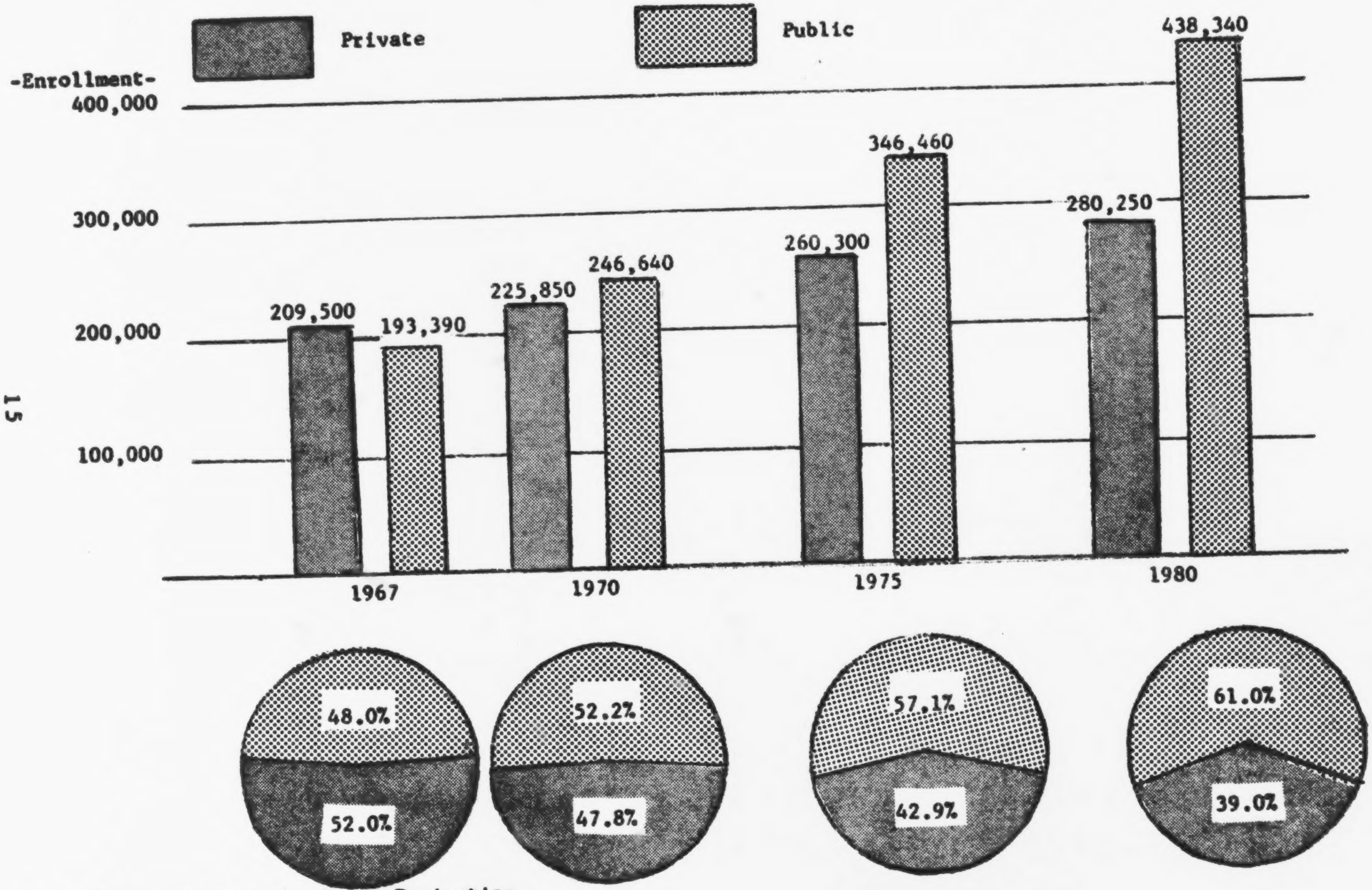
In terms of 2-year and 4-year institutions, the numerical increase was significantly greater in the 4-year institutions than in the 2-year institutions, but in terms of growth rates, the 2-year colleges continued to exhibit the greater rate of increase.

The full-time degree credit enrollment in 1966 exceeded that of 1965, as noted. However, the numerical and percentage increases were less than the increases from 1964 to 1965. This phenomenon was shared by the public and private institutions and by 2-year and 4-year institutions. A dramatic illustration is presented by the 2-year colleges where the growth rate dropped from 23 percent in 1965 to 12 percent in 1966. The growth rate for the total full-time degree credit enrollment declined from 13 percent in 1965 to 8 percent in 1966. The decline in the growth rate of full-time degree credit enrollment was not unexpected as it had been forecast in the enrollment projections prepared in August 1966 by the Office of Planning in Higher Education. The growing proportion of all college enrollments expected in the 2-year institutions is shown in Chart 2 on page 16.

The Office of Planning in Higher Education has developed three enrollment projections that update the figures presented in the 1966 Report. These have been labeled Minimum, Basic and Proposed.[1] These figures indicate that the full-time enrollment in New York State will increase to a minimum of 458,000 students in 1970. It is possible and quite probable, assuming changes in the migration patterns, that the figure will increase to 480,000 by 1970, to 628,000 by 1975, and to 754,000 by 1980, as listed in the Proposed Projection. (See Tables 4 and 5-C in Appendix). These projections tend to be linear due to the methodology, but the annual numerical increases will vary in relation to the variations in the projection base.

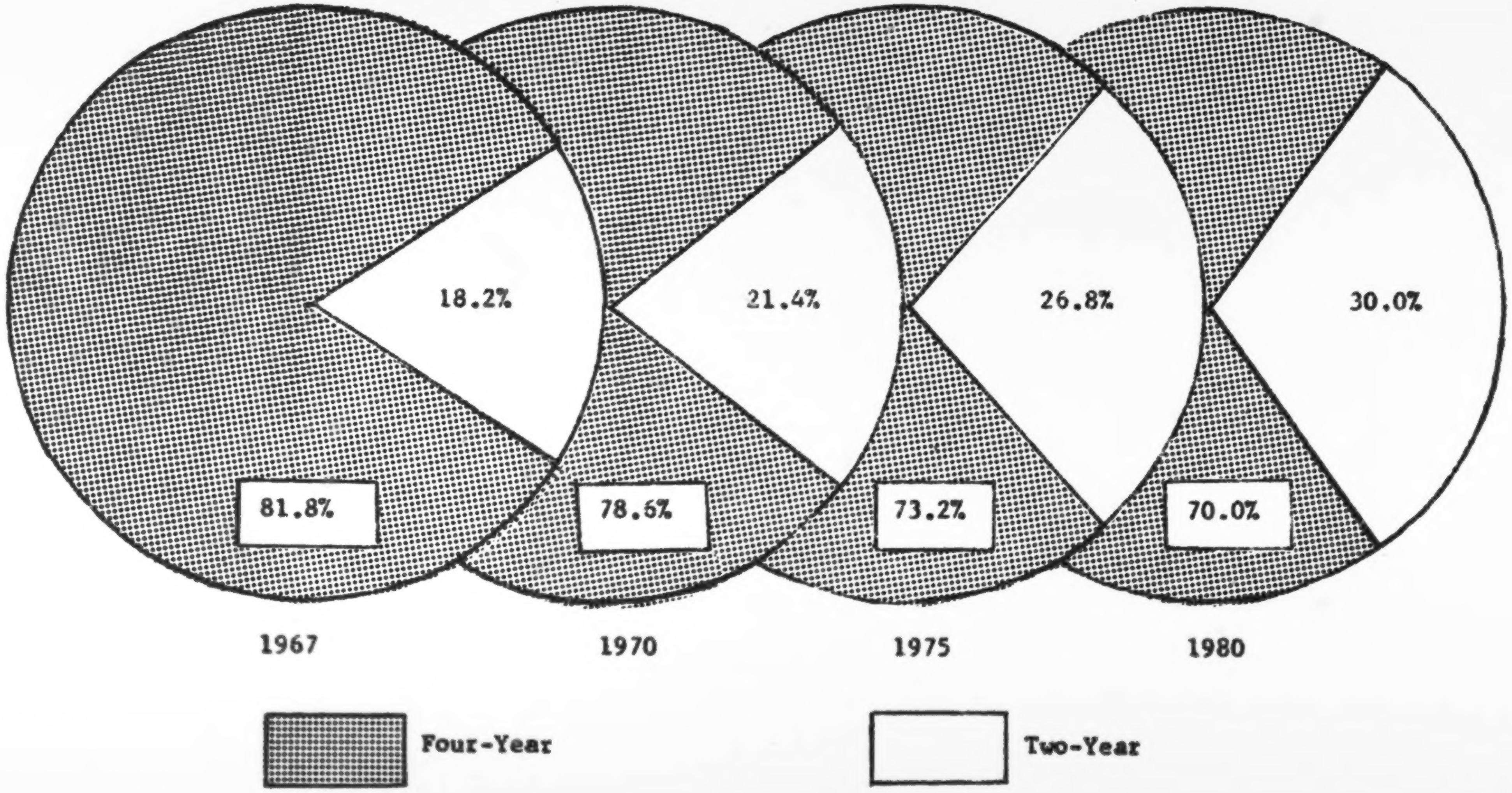
1) Description of methodology and detailed tables in Appendix.

Chart I: Projected Full-Time Enrollment Totals and Percentage Distribution, 1967-1980, in Public and Private Colleges and Universities in New York State*



*according to the Basic Projection

Chart II: Projected Percentage Distribution of Full-Time Students in Four-Year and Two-Year Colleges and Universities in New York State*



*according to the Basic Projection

The number and complexity of the variables involved in the development of long-range enrollment projections made complete accuracy a goal rather than a reality. Taking cognizance of this fact, and after consultation with an Advisory Committee of administrators from public and private colleges, the State Education Department is seeking to develop a computer model for projecting enrollments on a statewide basis. The model will utilize a greater number of variables and will develop more detailed projections, in terms of class level, fields of specialization, and migration patterns on both statewide and regional bases.

For planning purposes it is recommended that the figures set forth in the Proposed Projection, page 58 in the Appendix, be used.

Applications for Admission

During the month of August institutions of higher education were asked to compare applications for admission which were processed during the academic years 1966 and 1967. As of September 30, 92 private institutions, representing 70.7 percent of the total number of private colleges and universities and enrolling, according to 1966 figures, 84.9 percent of total private enrollment, had replied. State University and City University provided admissions data for the units within their systems.

Overall, private institutions of all types noted a 3.7 percent increase in the number of applications in 1967 as compared with 1966. On the 4-year level 84 institutions, enrolling 85.6 percent of 4-year private students processed 141,346 applications, a 4.1 percent increase. Nine 2-year institutions with 65 percent of private 2-year students processed 5,467 applications, a decrease of 4.6 percent from 1966. In the public sector applications to City University units increased by 11 percent while State University, for its 4-year or more units, noted a 14 percent increase. Two-year institutions, including community colleges and agricultural and technical colleges, increased by 16.4 percent.

During the period 1958-65, according to State Education Department data, on the average applications increased annually among private 4-year institutions by 6 percent; private 2-year by 20 percent; public 4-year by 18 percent and public 2-year by 33 percent.

There are also differences in the direction of applications within the private sector. A study completed in June 1967, for the State Education Department by Nelson Associates indicates the number of applications received by 15 coeducational schools had increased by 69.4 percent between 1961 and 1966. The comparable figure for 10 men's colleges was an increase of 25.6 percent and for 23 women's colleges of 31.3 percent.

Success of High School Graduates Pursuing Postsecondary Education

This past year an extensive study was made on the success of high school graduates gaining admission to some institution of higher education. According to the responses, which accounted for 83 percent of the schools in the State, 57 percent of the 1966 high school graduates applied to colleges. Of that figure, 88 percent were accepted for admission to at least one degree-granting institution. The following table indicated the percentage distribution of acceptees according to class rank:

Class Rank	Public Schools	Nonpublic Schools	Total State
Top Half	93%	94%	92%*
Third Quarter	78%	87%	86%
Upper Three Quarters	89%	92%	90%
Bottom Quarter	68%	74%	72%
TOTAL	87%	88%	88%

The most disturbing thing shown by the chart above may be the fact that 8 percent of the applicants from the top half of the graduating classes, and larger proportions from other quarters of the classes, were not admitted to even one institution. It is of critical importance to understand whether this was due to a lack of space at individual institutions or poor counseling that resulted in the student applying to colleges that were not suited to his needs or that demanded academic credentials which were greater than he possessed. An in-depth study of this question, probably on a sampling basis, will be undertaken this coming year and reported in the 1968 Regents Plan.

In addition to the 57 percent of the high school graduates who applied to college, another 8 percent indicated a desire to pursue some other type of postsecondary education. Thus, 65 percent of the 1966 high school graduates actively sought additional educational experience beyond the high school.

Although it appears that the 1966 graduates who sought additional educational experience were generally successful, it must be noted that about 35 percent had no definite educational plans beyond high school. Of greater concern is the fact that almost 25 percent of those students in the top half of their graduating class made no application to a higher education institution. Whatever the reasons, which deserve intensive investigation and study, this could be a significant loss both to the individuals who may possess the ability for college work and society which could use their skills.

*Total column is not the average of other two columns. It was calculated independently. Unequal bases of calculation in first two columns result in lower figure in total column.

SPECIAL SERVICES

The Reference and Research Libraries Program

The State Education Department's Library Reference and Research Resources Program, called the "3-R's," is concerned with providing access to the information resources of the entire State as preserved in its libraries, both public and private. Thirty-two of the State University of New York's institutions are participants in the 3-R's Program, and 5 of the City University of New York's colleges are enlisted in association with 73 private colleges and universities.

Since 1964,nine regional Reference and Research Library Systems have been chartered by the Regents. With the chartering and registration of the South Central Research Library Council in May the entire State is now organized to develop reference and research library resources and services. The program will attempt to meet the needs of serious library users everywhere, including those of students and faculty in all institutions, public and private in the State.

Grants of $35,000 are enabling the Systems to develop a plan of service and a communications delivery operation which will improve library service not only at City University and State University but will aid all advanced researchers in New York State. All of the 3-R's Systems are busy exploring various approaches to the problems of academic and research libraries. One such approach is the Academic and Research Libraries Bureau which has been organized in the Division of Library Development for the purpose of providing field services to academic and research libraries as well as to the Library Reference and Research Resources Systems. The coordination of statewide operations under the 3-R's Program is vested in this Bureau which sponsors regular conferences in cooperative services planning. The Bureau has worked closely with the Division of Higher Education and Teacher Education in the evaluation of academic libraries in connection with the registration of curricular programs. The Bureau also serves as a clearinghouse for research projects sponsored by the 3-R's Systems.

The Library Reference and Research Resources Program is developing the use of electronic devices in the acquisition, management, and retrieval of information materials. The systems now being designed will be applicable in any research library and will be made freely available. The projects include:

1. A Centralized Book Acquisitions study
2. System design for General Purpose Computer Based Catalog Maintenance for Research Libraries
3. Development of automation of the Serials Section of the New York State Library

The electronic data projects enumerated above will benefit all the libraries in the State. The results of experimentation and application at the State Library will be made available without cost.

At the State level, the New York State Library is engaged in a statewide interlibrary loan project. This experimental pilot project began in March of this year and will terminate March 31, 1968. The Department has contracted with 9 subject resource libraries including the New York Public Library, Columbia University, Cornell University, the Metropolitan Museum of Art, Engineering Societies Library, the New York Academy of Medicine, Union Theological Seminary, Teachers College, and New York University Libraries to provide materials in a program of compensated interlibrary loan. Thus colleges and universities throughout the State now have resources available to them from great private libraries that were not available before.

A facsimile transmission network has been established, linking 13 major libraries in the State with the State Library. The network includes installations at Columbia, Cornell, Teachers College, the New York Public Library, and receiving stations located at State University institutions at Albany, Binghamton and Potsdam. The City University colleges are able to participate through the 3-R's System located in New York City, the New York Metropolitan Reference and Research Library Agency, Inc.

Museums

The museums of the State are integral parts of higher education, representing through their vast systematic collections the resource material necessary to all phases of higher education, undergraduate and graduate study. These collections preserve, conserve, and interpret and are essential for the transmission of our scientific and cultural heritage. They also serve our scientific and cultural heritage as the scientific resource for basic research. To perform this function most effectively and efficiently, the museums must maintain staffs of specialists in history, science, and interpretation. During the past year the museums of the State have shared in the unparalleled increase in attendance which has been characteristic of museums throughout the country.

This has intensified the need for systematic training of museum exhibit staffs. The Cooperative Training program of the New York State Historical Association and the State University of New York at Oneonta has been successful in alleviating the shortage of museum personnel. The demand for graduates of this program continues to exceed the supply. It is anticipated that a new program embodying recommendations for increased support of museums and museum training programs will be developed for the 1968 Statewide Plan. The Regents endorse the development of this program.

Continuing Education

As society's common body of knowledge increases, new roles appear and traditional occupational positions are made obsolete. This requires that in addition to the long established obligations to provide formal programs for college age youth, greater attention must be given by educational leaders to providing adequate opportunities for all adults to continue their education to aid in adapting to changing conditions. The Department is now formulating a position paper on continuing education. While the recommendations contained in the paper have not yet been adopted, the essential premises can be described and are set forth for preliminary consideration.

1) Continuing education should be a factor in assisting individuals and communities to cope with the pressing issues of our times.

2) Continuing education as it can serve community needs, must be regarded as an essential public function, along with elementary and secondary education.

3) State support for continuing education may need to be increased in order to strengthen local leadership and programs. It is felt that State support will stimulate a body of ideas, techniques, methods, and materials for continuing education.

4) Continuing education must be made more accessible to all social, vocational and professional groups wherever the need exists in all parts of the State.

5) Stress must be placed on the formation of an effective partnership among all elements engaged in continuing education: public schools, community colleges, public and private colleges and universities, business and industry, and the various social and civic organizations that have continuing education functions.

It may be desirable to propose the formation of special centers for inner cities. These centers could focus on the learning needs of the people in the locality. Program priorities may be assigned to urban problems, vocational education, and concern for individual goals.

Further expression of the Regents attention to this subject took the form of a continuing education symposium, held on October 25, 1967, arranged by the State Education Department. The emphasis at the symposium was to give educators and leading representatives of business and industry, various minority groups, government, and labor the opportunity to discuss what Continuing Education should provide in New York State, with special attention to its role in raising expectations in urban areas.

It is intended to include detailed recommendations concerning Continuing Education in the Regents Plan for Higher Education to be issued next year.

International Education

The Department's Center for International Programs and Services is concerned with developing new programs dealing with parts of the world that are often unconsidered, in order to emphasize the increasing importance of the non-Western areas to our primarily Anglo-European society. One such program is the Educational Resources Center in New Delhi, India, which is now well into its second year of operation. This Center is concerned with developing materials for use in schools and colleges in the United States, and in New York State in particular, about India. Part of this work includes making available books and films from India. In addition, the Center is conducting a workshop on Indian Education for American school administrators and supervisors.

The Center for International Programs and Services is a member of the newly formed National Council on Foreign Area Materials, which was formed as the result of efforts initiated several years ago by the State Education Department. The Council, consisting of the Center and ten member college associations, involves over 300 colleges located in 30 states. The Council will bring increased financial and scholarly assistance to the activities of the Foreign Area Materials Center which has been operating in New York State since 1963 under a grant to the Board of Regents from the U. S. Office of Education to prepare educational materials for use primarily in colleges and universities.

The past year has also marked the completion of the first year of operation of the Carnegie supported Neglected Languages Program sponsored by the Center. Under this program, it is possible for a student enrolled in any college in New York State to study independently an uncommon language not available in the local curriculums. After an evaluation by an examiner independent of both the Neglected Languages Program and the college where the student is enrolled, the student receives college credit for satisfactory work. Programs were available in Chinese, Hindi, Japanese, Swahili, Portuguese and Vietnamese.

Several new cooperative programs for foreign area studies have been organized among New York State private and public colleges. One such program is in the Rochester area where arrangements have been completed permitting a student at one of the colleges to enroll in a foreign area studies or language course at any other college.

The primary concern of the Center for International Programs and Services continues to be that of encouraging the intellectual development of teachers, both in schools and colleges. A range of programs of inservice training and of independent study and research are supported by the Center. These programs range in variety from grants to single individuals for summer reading projects to seminars at universities for which graduate credit is given.

COLLEGE AND UNIVERSITY FACILITIES

In this section the Regents comment on facilities planning in the entire State and specific reference is made to facilities planning at the private institutions, at State University and at City University. During the past five years the colleges and universities of the State have expended approximately one and one-half billion dollars for additions to physical plants or for the improvement of existing facilities. This effort was necessary in order to accommodate the growing numbers of students seeking college attendance and to provide research and specialized instructional space necessary for the conduct of modern educational programs and services.

During the past five years there has been a shift in the pattern of financing with increasing reliance placed upon public funds. Specific reference could be made to the increased use of the New York Dormitory Authority or to the development, since the passage of the United States Higher Education Facilities Act of 1963, of applications by public and private institutions for grants under this program. The conviction that public support of construction projects for colleges and universities may be a continuing obligation of the State and Federal governments was expressed one year ago in action taken by the Congress. At that time it was decided to set aside a sum of approximately 4 million dollars per year over a three-year period to undertake a detailed analysis of the facilities, plans, and requirements of all institutions and the amounts and sources of money that would be required for capital development. This action has resulted in the development in New York of a Comprehensive Facilities Planning Project for which the Regents, serving as the State Commission for the Facilities Act, have accepted an obligation to administer.

Figures presenting detailed information concerning additions to physical plant and sources of funds for the past five years and for the next five-year period for all institutions of higher education in the State are presented in Tables 6 and 7 of the Appendix. As noted, the expenditure over the past five years amounted to one and one-half billion dollars and the projections submitted by the individual institutions this year indicate that the sum for the coming five years may reach toward 2.8 billion dollars. It must be observed that the 1966 Progress Report gave a figure of 1.74 billion dollars for anticipated construction in the same period. The discrepancy is due in part to the fact that this year's figure incorporates movable equipment, but the gap in the two estimates underscores the importance of a sharp refinement in planning data with regard to construction. This process is now well underway. One year ago detailed statistical collecting procedures were established in connection with schedules that were a part of the general information survey of the U. S. Office of Education. Of particular importance, however, is the fact that the Comprehensive Facilities Planning Project will permit the collection and analysis of data in such a fashion that detailed studies of trends and projections will be possible on a comparable basis from one year to the next.

The Higher Education Comprehensive Facilities Program is divided into three parts. The first element, the basis for planning, involves analysis of the statewide goals of higher education, the role and scope of the individual institution in meeting such goals, and the place of New York State within regional and national planning for higher education. In other words - Who is to be educated? What type, kind, and level of education will he receive? Where will he be educated?

The second element is directed toward provision of basic and comprehensive data on which projections of facilities needs can be made within the goals established in the first element. Data regarding existing and planned academic programs, enrollment, faculty and staff, finances and facilities will be collected, analyzed, and projected. In order to determine facilities needs, the analyst must know what academic programs will be offered, the number of students attracted to such programs, the faculty and staff necessary to support the programs and enrollments, and the financial sources available.

The third element of the program involves assistance to the individual institution in projecting its own needs. Limited financial grants to institutions for planning purposes may be available in subsequent years. Workshops and publications will provide information on such items as: the use of a data system for planning, procedures for campus and individual facilities planning, and innovation as it affects the planning of facilities. It is anticipated that as a result of the extensive data collection, information will become available to greatly enhance budgeting and planning for both the institution and the state.

Sources of Money

Bonds recently issued by the State University Construction Fund and the Dormitory Authority show steadily increasing interest costs and the outstanding revenue bond issues of the Fund and the Authority now exceed $1 billion. The increased cost of such revenue bonds, and the magnitude of the construction plans of both public and private institutions of higher education, suggest that the time has come to study the possible limitations of funds available from student tuition and fees to repay loans for facilities. For example, consideration should be given to the question of whether or not the State University can provide enough income at existing tuition rates to pay off bond issues for the academic facilities that are constructed and planned. Many private institutions also are financing a major portion of their facilities through revenue bonds which are repaid through first call on tuition and student fees. The need to repay these bond issues is exerting pressure for higher tuition charges and other student fees which may price higher education beyond the ability of many students to pay. The use of tuition funds for facilities also deprives institutions of resources that could be otherwise used for such educational purposes as faculty salaries.

The Comprehensive Facilities Planning Project authorized by the United States Congress includes a detailed study of the facilities needs of all colleges and universities in each individual state during the ten years, to determine in detail the amount and kinds of buildings needed, to estimate the cost involved, and to predict probable sources of funds. The results of such a study will enable Congress to judge realistically the level at which Federal aid for facilities must be provided in the future.

Private Colleges and Universities Facilities Planning

The private institutions have increased their five year (1966-1971) capital construction estimate from $774 million, as reported last year in the 1966 Revision, to $1,156,595,000 this year. These figures may be compared with the $601 million that have been expended for construction by private institutions during the past five years. During the past five years (Fall 1961 to Fall 1965) the private institutions increased their full-time enrollment by approximately 50,000 students. It is anticipated that the institutions will increase their enrollment during the next five years (Fall 1966 through Fall 1970) by another 28,000 students. A comparison of the diminishing enrollment growth with the doubling of capital expenditures raises some questions. These figures in themselves appear unreliable, but without further information it is impossible to comment on the accuracy of the projections or on the other factors that might validly explain this seeming acceleration of construction. It is expected that the Comprehensive Facilities Study will assist in providing answers to this question.

The private institutions (as seen in Table 7) are anticipating some $312 million in Federal support in the next five years for their construction plans. To provide support at this level would require, under the Higher Education Facilities Act, grants and loans of approximately $60 million a year to private institutions alone as compared with the present funding of approximately $50 million a year which is allocated to both public and private institutions. There is clearly a critical need for more detailed analysis of the construction plans of private as well as public institutions so that long-range planning will be realistic.

State University of New York Facilities Planning

The 1967 Progress Report and Interim Revision of the Master Plan of 1964 for the State University of New York again provides a short summary of the facilities which have been constructed during the past year, projects currently under construction, and proposed new projects. No detailed information is contained in the report of Appendices with regard to individual campuses or buildings.

The section of the 1967 Interim Revision of the State University Master Plan dealing with facilities addresses itself to the topic in very broad terms. The statement of goals and objectives in facilities planning is highly praiseworthy but of little value unless specific details are provided on a campus-by-campus basis enabling plans to be evaluated in terms of objectives and the development of regional resources in relation to needs at particular levels of study.

There is no indication that the State University has evaluated the use of existing facilities or coordinated projections of needs in light of the use of such facilities. It is understood that the facilities research division of the Office of Architecture and Facilities is now establishing evaluative processes to refine projection techniques.

The projections of State University for capital facilities reported in the Higher Education General Information Survey for the coming five-year period show anticipated construction of $1,307,287,000. Future Master Plans and related documents must include greater detail in support of a construction program of such magnitude. Preliminary meetings with planning officers of the State University have dealt with the incorporation of construction data arranged by campuses in the 1968 Master Plan so as to permit an evaluation of both present and future conditions.

City University of New York Facilities Planning

The legislation which created the City University Construction Fund will greatly assist the City University of New York in meeting the need for additional facilities. It is anticipated that the Construction Fund will facilitate the building process and also provide a vehicle with which the master planning of campuses and facilities will be improved. The Construction Fund, however, is not responsible for the development of program requirements or educational specifications of the facilities. Such specifications depend upon the academic planning procedures and the use of policy planning factors (such as the amount of space needed per student, per faculty member, or similar bases on which projections of facilities needs may be made). For example, 1967 Revision attempts to explain the need for faculty office space but does not provide explanations for projections of other types of proposed space needs.

The report of the status of the building program in Appendix 1 of the City University 1967 Revision indicates that the planning for some facilities has not progressed during the past two years. Again, it is anticipated that the development of the City University Construction Fund and additional staff services in the central offices of the City University will assist in speeding the progress of these projects.

The 1967 Revision of the Master Plan, in the section on "New or Additional Facility Needs," suggests that the City University provide housing for the Chancellor, for college presidents, and housing for faculty and staff. With regard to housing for faculty and staff it will be possible to give serious consideration to the plans as more detailed information is provided including proposals as to the method of financing of such construction. Brief mention is also made as to the feasibility and desirability of student housing. This is a concept with major implications and merits serious study.

The costs shown on Pages 23 and 24 of the City University Master Plan Revision (as reproduced on Pages 62 and 63 of the Appendix to this document) show an increase of $119,774,300 from figures presented in the 1966 Revision. These costs are presented as broad general estimates of need based upon a gross square-foot-per-student factor, a cost per gross-square-foot of building space and site acquisition estimates. Because of the importance of the programs with their varying demands and the magnitude of the expenditures involved, the process developing these estimates must be reviewed in detail and refined. It is understood that officers of the City University are undertaking studies and have indicated a willingness to work with the State Education Department in the development of factors for the projection of space needs.

With regard to proposals set forth on Pages 23 and 24 designated A, D, H, I, L, O, P, and Q, the Regents approve the recommendations. It is understood that the costs as presented are estimates which shall not limit expenditures.

With regard to the other recommendations set forth on Pages 23 and 24, the Regents approve the allocation of funds to City University for preliminary planning in order to develop more specific cost figures.

The development of the planning process is the responsibility of the officers of the City University and will include such developments as program requirements, architectural master plans, and preliminary or schematic drawings.

Study of Factors for Projection of Space at Public Universities

During the coming year, a detailed and careful study should be undertaken by the State Education Department of the standards or other factors used by the City University and the State University to plan capital expenditures and project space requirements for different buildings. These unit factors are of fundamental importance in terms of realistic planning and an effective relationship between program requirements and eventual building costs.

PART II

THE REGENTS' REVIEW OF THE STATE UNIVERSITY MASTER PLAN 1967 INTERIM REVISION

SECTION II

REVIEW AND ACTION ON THE 1967 PROGRESS REPORT AND INTERIM REVISION OF THE MASTER PLAN FOR THE STATE UNIVERSITY OF NEW YORK

Introduction

The 1967 Report of the State University accurately reflects the progress and momentum that has been maintained within the University during the past year. Full-time enrollments in the University grew from 107,748 in the fall of 1965 to 119,074 in the fall of 1966. The growth followed the pattern projected a year ago.

Because the essence of any educational program rests in the quality of the faculty, it is particularly noteworthy to read the impressive list of important appointments made in colleges at all levels. The officers of central administration and the staff at the individual units are to be praised for having successfully planned and supervised construction of the necessary facilities to accommodate the enrollments in the programs as required. A visit to any of the universities' campuses will graphically illustrate the extent of this achievement. All members of the University have a right to be proud of their truly monumental accomplishment. Yet growth at so vigorous a rate brings with it problems of many kinds.

The Regents approve of the 1967 Interim Revision of the Master Plan of State University unless the following comments are to the contrary or propose some modification or qualification.

ENROLLMENTS

Recommendation Number 9. That, whereas full approval was given to the State University planning goal of 184,650 full-time students for the year 1970 as set forth in the 1966 Master Plan Interim Revision, but only qualified approval given to estimates beyond that data subject to further study;

and, whereas further study was undertaken in cooperation with the State Education Department to identify a range from minimum probable enrollment growth to maximum foreseeable enrollment growth, as well as interim feasible enrollment growth for the State and State University to 1975;

it is, therefore, recommended that a feasible enrollment planning goal for State University for 1975 be established at 290,400 full-time students as a deliberate choice above the minumum probable alternative, reflecting gains in college input rate of undergraduates, gains in graduate enrollments and progress in the direction of eventually providing places for students in public higher education equal to the excess of exports over imports who seek public higher education in another state.

The revised enrollment planning goal of the State University of 290,400 in 1975 is approved.

The State University enrollment goal is based on many elements. Among these elements is an expectation that there will be a shift in migration patterns of attendance at out-of-state public colleges. Presently there is an excess of 25,000 enrollments in such public institutions above imports into New York. The goal proposed assumes a willingness on the part of the State to provide spaces in public institutions equivalent to the excess of students generated in New York but registered in public institutions elsewhere. The equity of accepting such an obligation on the part of New York, as in other states, seems obvious and is supported.

Projections developed by the State Education Department indicate that the State University of New York will enroll about 285,800 students in 1975, which for practical purposes is the same as the State University proposal. Both figures are based on an assumed change in the migration patterns of students and upon an assumed increase in the growth of graduate enrollments.

The change in migration patterns will occur as a result of:

1) a tendency of New York State residents to enroll in New York State colleges and universities to a greater degree than at present.

2) a tendency of out-of-state residents to enroll in New York State colleges and universities to a greater degree than at present.

It was assumed that the change in migration patterns would affect the public sector of higher education almost exclusively and that the major share of this increase would be in the State University, and a lesser amount in the City University.

Conferences and consultations among the various sectors of higher education, involving the State and City Universities as well as private institutions have produced a greater understanding of the assumptions and rationales upon which the projections are based and the differences in the projections are reduced. Some differences in methodology still exist and continued effort on the part of all concerned parties is recommended.

TWO-YEAR COLLEGES

It has been obvious for several years that the community and technical colleges represent the most rapidly developing sector of higher education in the State. This has been made manifest by the statistics of enrollment growth. Of greater importance, however, has been the emerging idea of a comprehensive service "for every qualified applicant of post high school age." The consequences of such an ideal are impressive. Not only does it involve service to numbers, but a range of occupational and academic programs to match all their needs will have to be developed and will require the most careful planning if available resources are to be matched with the magnitude of the demand. Concommitant to this concept of service to large numbers, referred to as a horizontal component in the report, there is the concept of vertical growth to provide "diversified opportunity at various levels." The intent is to meet the needs of persons who in times past have not been served by any kind of higher education and would include those who for one reason or another have not completed high school experience and have passed into their adult years. The remarks in Section I of this report dealing with the disadvantaged place the Regents on record as firmly supporting the development of such a vertical component as a critical function of education with a heavy share of the burden on the 2-year college system.

In order to make the idea a reality, however, it is necessary that future plans delineate more precisely what the nature of the new programs should be, the numbers of students who should be served, and the location of these programs. The older plans for the 2-year college system should be updated by a new master plan describing in terms of this enlarged role, the framework of the 2-year college system for the entire State. In developing such a master plan attention must be given to the important contribution being made by existing institutions.

The growing demand for educational service has been accompanied by a concommitant but accelerating increase in the cost and difficulty of providing such services. The highly specialized nature of many programs has placed a heavy burden on conscientious educators and community leaders. The demands for specialized instruction and expensive equipment call for a review of regional relationships in connection with community college programming and the possibility of the sponsorship of either institutions or cooperative programs by several county units serving a metropolitan area or region.

Therefore, the Regents believe that the State's Master Plan for 2-year colleges should be brought up to date and include:

1. A description of measures to establish the vertical component referred to in the 1967 Master Plan Revision, and

2. Propose patterns of regional relationships identifying regions and programs that hold promise for development.

Recommendation 43 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That the principle that no existing 2-year college be expanded into a 4-year college be reaffirmed, and that appropriate legislation be enacted to enforce the principle."

The Trustees of the State University are to be commended on their reaffirmation of this recommendation. This principle is responsible to a very considerable degree for the growing strength and character of the 2-year institutions.

Recommendation 45 in the 1966 Interim Revision of the 1964 Master Plan as amended by the State University Board of Trustees on March 9, 1967, stated:

> "That establishment of new community colleges be approved in principle for the Olean-Cattaraugus region, Schenectady County, and Saratoga County, when study reveals that such action is desirable and feasible."

No action has been taken by the Regents in connection with Olean-Cattaraugus Counties or Saratoga, pending the development of specific proposals.

With regard to Schenectady County, the Regents have approved the amendment of the Master Plan with regard to establishment of a community college in that county. Observing, however, that existing colleges in the area, including a community college, have a heavy enrollment of commuting students from Schenectady and, further, that enrollments in certain programs, especially in the technical field, draw upon a restricted enrollment base, the Regents in granting approval have done so on the condition that a planning review take place and approval be granted prior to establishment of major curricular programs at the new community college. The purpose of this action is to promote orderly development of the new college in such a way as to strengthen the total resources of the Capital District without contributing to undue competition for students, duplication of effort or expenditures.

Recommendation 46 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That those Community Colleges which are located in large geographic sponsorship areas or areas of rapid population growth be encouraged to consider multiple campus operations."

Brief reference following the recommendation is made to active consideration being given by Erie County Technical Institute to the acquisition of a site for its second campus operation. The establishment of a branch campus by any institution, public or private, within the State is a development that should be reviewed by the Regents. When the study of a second location has been analyzed by State University, the Regents will consider the proposal in relation to educational needs, existing programs, and additional costs.

Recommendation 47 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That in accordance with the recommendation of the Governor, the State University proceed to establish and supervise Urban Centers of vocational training in Buffalo, the Capital District, New York City, Syracuse, Utica, Rochester, and Yonkers, in cooperation with one or more community colleges in each urban area."

The Master Plan Revision commentary on the programs of the Urban Centers is brief. The importance of this program warrants more attention in annual Master Plan Revisions than State University has provided this year.

The enrollment growth which is likely to increase from approximately 900 in the fall of 1966 to approximately 1700 this fall is one measure of the increasing attractiveness of the Centers. In time, figures on persistence in programs, transfers for additional training, or placement in gainful employment will make possible a realistic assessment of the needs, scope, and costs of the programs that must be undertaken in our cities.

The Urban Center Program offers an example of potentially effective partnership involving State and City Universities, the community colleges, employers, and civic agencies.

Recommendation 48 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That increased support be sought and given to the Agricultural and Technical Colleges for the new programs of sub-technical or vocational curricula of varying lengths for high school graduates, persons of post-high school age, and other adults who reside beyond reach of a community college."

The Regents strongly endorse the principle that full opportunity for continuing and vocational education be made available to all the people. In the achievement of this objective, it is expected that all educational resources will be utilized in a complementary relationship. Such educational resources should include the community colleges, the high schools, boards of cooperative educational services, other agencies, and cooperative arrangements involving two or more sponsoring units. As a corollary of this principle, it is expected that organizational arrangements and patterns of communication will be developed to ensure comprehensive planning on a regional basis, the avoidance of duplication and competition, and the effective utilization of the State's educational and financial resources.

The implementation of this principle will involve meetings of representatives of the secondary schools who seek to initiate new programs of vocational education in consultation with representatives of community colleges, agricultural and technical institutions, and other institutions of higher learning in the region. Before the approval of the Commissioner is given to establish such programs or to allocate funds to such secondary level programs, assurance will have to be provided of consultation between the secondary and higher education authorities.

Conversely, in such cases as programs of vocational education initiated at agricultural and technical or community colleges, it will be expected that the college authorities will undertake communication and consultation with representatives of the secondary schools. No Master Plan approvals will be granted nor federal vocational education funds allocated for such developments until such evidence of consultation and cooperative planning has been presented.

THE UNIVERSITY COLLEGES

In the section on the University Colleges the lengthy list of faculty appointments indicates, by the range of academic fields represented and the stature of the individuals appointed, the success that these institutions are achieving in the transition to multiple purpose institutions. The colleges are developing a range of programs and services of great value to the professions and to the communities in which they are located. There is a sense of movement, of achievement emanating from these colleges.

Recommendation 51 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That a new college be established in the Herkimer-Rome-Utica area with strong emphasis upon the sciences and technology, and that it be confined to upper divisional and graduate programs below the doctoral level."

"Preliminary planning for the senior College to be developed in the Herkimer-Rome-Utica area has been undertaken. Local leaders in the area have been in consultation with State University officers on a wide range of matters, and attention is being given to the development of an academic program appropriate to an upper division institution that offers programs only in the range of the Junior year through the level of the Master's Degree."

The Regents need more information, to be derived from the preliminary planning studies that are mentioned. No action on this proposal is possible at this time.

Recommendation 52 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That all existing University Colleges continue their conversion from teacher training institutions to colleges of arts and

> science, and be encouraged to fill in the remaining gaps in their curricula without delay."

This recommendation and the comments offered in connection with it substantiate the very considerable progress being made in the conversion of the University Colleges to multipurpose institutions. There is reason to commend the central staff and the faculties of these campuses on their remarkable achievements in the development of strong programs in the liberal arts and sciences.

The question of the importance of maintaining vigorous programs of teacher preparation represents an objective that must also be realized. As was mentioned in the first section of this report, the Regents are planning to initiate a study of teacher education in the State and one important part of this study will deal with the role of the State University colleges. Special attention will be given to their contribution to the supply of elementary and secondary teachers for the schools of the State.

Recommendation 53 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That all existing or proposed University Colleges be encouraged to offer proposals for new majors in advanced technical and occupational curricula to respond to legitimate pressures from two-year graduates for more advanced and broader career opportunities."

In extending opportunities for 2-year graduates, including those in advanced technical and occupational fields who seek to continue their education, the measurement of "legitimate pressures" must be refined in quantifiable terms so as to serve the greatest number of persons in the fields of greatest interest and need. This important task will require the attention of manpower and other specialists. The response to the measured need will have to be supplied by all sectors of higher education. The State University's share in meeting the need will be a major one.

SPECIALIZED AND STATUTORY COLLEGES

Recommendation 55 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That the Specialized colleges, including Contract colleges, not expand their programs of instruction and research into areas more properly assigned to the University Centers."

Recommendation 56 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That the functions and programs of the Contract colleges and the relationship of these colleges to the State University continue to be studied."

One year ago the Regents indicated that they had a strong interest in the conduct of studies with regard to the meaning of these two recommendations. It is understood that the brief reference following Recommendation 55 in this year's report of the State University refers not to the development of formal guidelines but to the fact that officers of the State University and administrators of Cornell have been meeting together in a cooperative spirit to identify areas where joint endeavor between the State and Cornell Universities might enrich the educational resources of New York. The Regents expect further clarification and reports on studies in connection with these two recommendations.

THE UNIVERSITY CENTERS

Material included in the Interim Revision suggests that the University Centers are rapidly becoming what their name suggests in the fullest sense of the term. Faculty appointments include persons of national and international stature. Research activities, scholarly publications, and public service in a variety of ways are increasingly characteristic of all of these institutions. A parallel concern for the welfare and interests of the individual student is reflected in plans to develop a college structure within the University Centers.

Recommendation 60 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That only one type of University Center be approved for the State University, which is the comprehensive general campus offering the full spectrum of occupational as well as traditional arts and science undergraduate programs, graduate and professional programs and schools, and organized research and public service units, limited only by the obligation to avoid duplication of programs among the Centers and Colleges statewide."

During the past year the Regents have approved recommendations of the State University Board of Trustees to amend the Master Plan to include the development of a new School of Architecture at Buffalo, a School of Nursing at Albany and a School of Nursing at Binghamton.

In considering the establishment of a School of Business Administration, it is recognized that the State University at Binghamton has offered programs in the field of business and accounting since its inception. The proposal is basically a reorganization of existing programs which should provide a strong base for growth of curricular offerings, development of faculty, and enlargement of enrollments. The amendment is approved.

The recommendation to establish a School of Advanced Technology at Binghamton contains three elements:

1) Establishment of Masters and Doctoral level programs in the computer sciences and applied mathematics;

2) Development of service courses at the graduate level for engineers from the local industries; and

3) Gradual building of a wide range of graduate courses, programs and majors in engineering and advanced technology characteristic of a school of graduate engineering.

It is appropriate for a University Center, and particularly one located in Binghamton, to take advantage of its resources and to offer programs in computer science and applied mathematics. This phase of the proposal is, therefore, approved.

The University Center is properly accepting an obligation to extend educational service to local professional groups and industries. The University is encouraged to build a program of this kind of education. At the same time, cognizance must be taken of the fact that Syracuse University has, for over fifteen years, offered certain graduate courses in engineering and related studies to persons in the area. The Regents reserve judgment on this phase of the proposal until additional studies of the possible effect of this development upon existing programs in the area have been completed.

The question of the nature of the graduate program in advanced technology with emphasis on engineering deserves careful study. It will take time to develop this academic program. It is to be noted that the Office of Science and Technology of the Education Department expects by December to have available a study of Engineering Education Resources in the State. This study should be carefully considered in terms of what it reveals on such important topics as the need for additional graduate programs in engineering. Such information may well indicate that further consultation with engineering educators is required. Until the study referred to has been received and analyzed, action on this part of the proposal is deferred.

CONTINUING EDUCATION

Several of the recommendations, numbers 38 through 40, report significant progress in building programs of Continuing Education on the various campuses of the University. The Regents interest in such programs is described in Section I of this report. The importance of developing conference centers with residential facilities is a matter deserving strong support. The existence of such centers and facilities would permit many cooperative programs to be developed involving units of the State University, the Education Department, and other educational agencies throughout the State.

LIBRARIES

The library section of the State University of New York 1967 Interim Revision of the 1964 Master Plan (as in 1966) is devoted to an ambitious projection of growth which would eventually comprise a combined collection of all units to exceed 15 million volumes. These plans are set forth in general terms. It is proposed that the University create sustaining collections of considerable strength on every campus and this is to be accomplished with such central services as cataloging and processing, a warehouse operation for lesser used materials and a sophisticated communications network.

The statement takes note of the Library Reference and Research Resources Program and mentions the participation of State University units in the planning and development of the program. It is imperative that the State University continue and enlarge its participation in order that the State's total library resources will be effectively utilized.

On Page 39 in the fourth paragraph, the State University proposes to introduce library technician programs "in several of our Community Colleges." The statement goes on further, "The experience in other states with this type of personnel has been good." It should be remembered that limited experience with this type of program in New York State in 1962 was not successful.

It may be that some significant changes have developed in this situation since 1962, but no extensive investigation has been sponsored in this State so as to result in such planning as State University now proposes for its community colleges. It is recognized, however, that in certain regions of the State there has been study given to the possible value of such a program, and library authorities have been consulted, opportunities assessed, and a basis for program development established.

The status of these workers, their training and their duties, and the need for their services should be studied and programs should be developed on a carefully selective basis when need for this kind of educational development is demonstrated.

Recommendation 23 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That the ultimate sizes of campus libraries of the State University of New York be established to facilitate the planning of facilities and acquisitions, subject to

> continuing Master Plan review, as follows: University Centers: 2,000,000 holdings; University Colleges: 500,000 holdings; Agricultural and Technical Colleges: 150,000 holdings; Community Colleges: 100,000 holdings; Others: to be determined."

The use of the word ultimate in the quantitative projections for libraries gives this Recommendation a visionary quality. If it is to be the basis of budgetary and facilities planning it should cite practical considerations. For arriving at such considerations, attention may be called to "Quantitative Criteria for Adequacy of Academic Library Collections" by Verner W. Clapp and Robert T. Jordan (College and Research Libraries, September, 1965, v. 26, pp. 371-80). These criteria were prepared by the Council on Library Resources for the State of Ohio in a study entitled, "The Libraries of the State-assisted Institutions of Higher Education in Ohio - Their Maintenance and Development - Guidelines for Policy." The criteria present a rational measuring device to judge the present adequacy of academic libraries and on which projections of institution growth can be based.* This document may be useful in attempting to predict the development of collections on adequate lines to support the teaching program and the enrollment of the individual institutions.

On a preliminary trail basis the Clapp-Jordan formula was applied to measure the adequacy of present collections at the University Center at Albany, the University Center at Binghamton and the University Colleges at Cortland and New Paltz. The results suggest that the volumes at Albany constitute about 41 percent of the number called for under the formula and the same figure applies at Binghamton. At Cortland, on the other hand, the present holdings are about 5 percent in excess of the requirements set under the formula as adequate in relation to teaching programs and enrollment, while at New Paltz, the holdings are about 84 percent of those that the formula would suggest. This exercise, done on the basis of general information available, represents a crude index of the fact that an analysis on a campus-by-campus basis may suggest the need to accelerate or to slow down rates of growth in relation to existing educational programs. It must also be kept in mind that the rate of development of library collections may also be dependent upon the achievement of building programs on schedule and the availability of library manpower.

The number of titles and volumes in or projected for a library's collections is by no means an index of its value to the learning process. A quality factor is the sine qua non of collection development. The collection should include the best and most useful materials in each field which is encompassed in the curriculum and in the basic research areas envisaged. More important than the size of the collection per se is its quality in relation to programs offered.

* The criteria include: (a) a minimum number of volumes (50,750) for a basic collection (b) 100 volumes per faculty member, (c) 12 volumes per student (graduate and undergraduate), (d) 12 volumes per student in honors or independent study programs, (e) 335 volumes per undergraduate major, (f) 3,050 volumes per Master's Concentration, (g) and 24,500 volumes per Doctoral Field.

The program as embodied in the sum of the library recommendations presents a problem. Recommendation 24 projects a highly sophisticated communication network. Recommendation 25 is concerned with the centralized processing and retrieval of information. Recommendation 26 is concerned with a warehouse facility. None of these recommendations takes into account or makes provision for the bibliographical planning and control which would be essential to the effective realization of any of these functions and objectives. Moreover, Recommendation 23 presupposes collection sizes to achieve self-sufficient libraries on every campus. Why are elaborate plans for communication and dissemination of materials through the entire system being projected while at the same time self-sufficiency is recommended for each campus?

The Master Plan also suggests that State University will operate as a library resource, self-sufficient within its total body of campuses. This means that its programs for the expansion of curricula will require the development of a total library resource equal to, if not exceeding, any of the largest presently known research libraries in this country. This complex of library collections would represent an aggregate rather than a real research library because the incidence of duplication from campus to campus would be high, perhaps in the neighborhood of 60 percent to 70 percent. The Plans for communication projected for State University should take into account the much larger picture of increased bibliographic access on a statewide and even a national basis. The State Education Department is involved in statewide bibliographic planning, and it is essential that the State University relate its program to the development and exploitation of statewide information resources. The present experience in interlibrary loan sponsored by the library reference and research resources program is an attempt to solve the procedural problems in statewide access, so as to make free and conveniently available the great subject resources of the State, both public and private, in a compensated system of interlibrary exchange. It looks toward a coordination of bibliographic development on a statewide basis which is revolutionary and demands bold and imaginative planning.

The potential which resides in the State University for the development of a powerful research collection must proceed through coordinated planning. The projections set forth for its growth in this Master Plan require the most careful bibliographic organization and surveillance if it is to succeed. The Master Plan does not describe a mechanism within the State University for accomplishing this sort of coordination. Serious consideration should be given to a proposal similar to that of City University, with reference to its establishment of a coordinator of library services.

EDUCATIONAL COMMUNICATIONS

Recommendation 28 in the 1966 Interim Revision of the 1964 Master Plan stated:

> "That a University of the Air be established to produce college-level courses to be offered to the people of the State via educational television, radio, and motion picture, and to coordinate such audio-visual production with the campuses of State University offering course credit."

The Regents note with approval that the microwave New York Network, an interconnection of the independent educational television stations in New York, will become fully operational in October '67. Its programming will be drawn from national, regional, and local sources. The Network will also draw upon programs produced by the State Education Department and the Regents' chartered ETV councils that operate the educational stations of the network.

The State Education Department, during the past year, has produced a television film series on "Education and Communication" for higher institutional credit, and will make available a series on dramatic literature, and a series to be used by both State University units and private institutions of higher learning interpreting developments in American civilization.

Recommendation 28 in the 1966 Interim Revision of the State University Master Plan called for the establishment of a University of the Air; this was begun in the Spring of 1966. This fall, the State University and City University will offer, through joint sponsorship, a series of basic undergraduate freshman and sophomore courses. The Regents note that City University omitted reference to this program in their Master Plan Revision for 1967. It is understood that the City University intends to include a detailed description in their 1968 Plan when a long-range program will be completed.

As a further step in the developing use of new instructional devices, Instructional Resources Centers have been formed on more than half of the State University Campuses.

A committee has recently been established under the chairmanship of the Director of Educational Communications in the Education Department. It includes representatives of the State and City Universities and selected private institutions, to assess the needs and resources for the preparation of specialists in this field. The study will be addressed to requirements at both the technical and professional levels. The Regents encourage this study and will look forward to recommendations in connection with the 1968 Regents Statewide Plan for Higher Education that will set forth in detail the kinds of programs that should be considered, the level of study involved, something of the numbers that would represent a desirable enrollment, and the location of such programs at public and private institutions.

PART III

THE REGENTS' REVIEW
OF THE
CITY UNIVERSITY MASTER PLAN
1967 INTERIM REVISION

REGENTS REVIEW

CITY UNIVERSITY OF NEW YORK
1967 INTERIM REVISION OF THE MASTER PLAN

The third Interim Revision, submitted by the Board of Higher Education of the City of New York, focuses upon major developments and incorporates a limited number of new proposals. In so doing, this Revision returns to the format of earlier Master Plan Revisions, but it anticipates an ambitious planning document in the fall of 1968.

The Interim Revision is presented in a format that is suggested in the original legislation establishing the master planning process, and the comments offered in this part will be arranged in relation to that presentation.

With the assurance of increased financial support provided under the legislation passed in the spring of 1965 to establish a City University Construction Fund, and provided with a formula for State and City financial support for operating budgets, the University moved forward aggressively to meet problems of increased enrollment, needed facilities, and new and special programs for the disadvantaged. Although these major undertakings are in their early phases of development, it is nonetheless evident that significant progress is being realized.

With the comments that follow, the Regents give general approval to the 1967 Revision of the Master Plan of City University and those amendments of the facilities section set forth on page 23 and 24 as modified in the Appendix of this document, pages 62 and 63.

Academic Program Development and Emphasis

In reporting on curricular and educational developments, reference is made to the opening in the fall of 1967 of Richmond College for junior year programs and York College which is admitting a freshmen class. In order that the Regents may follow the plans of development of these institutions in regard to their relationship to other divisions of the State University and to private institutions, it is urged that future reports include more detailed information with regard to enrollments, programs, and facilities plans for these new colleges. These are major undertakings, and they deserve careful consideration and strong support.

The Regents approve the amendment of the 1967 Interim Revision of City University to establish the Bronx Center of Hunter College as a senior college of the University.

It is evident that the doctoral programs projected a year ago have been vigorously developed. The reference to additional doctoral programs indicates that work is underway to prepare programs leading to doctoral degrees in education. This consideration extends to such areas as Educational Administration, Educational Psychology and Social Foundations of Education. Several of these programs have been under consideration for at least three years, and in view of the fact that the City University possesses special resources to offer strong programs in these areas, it is hoped that development can perhaps move from the level of consideration to implementation. The special programs of the urban environment give a particular urgency to this development in order to serve more effectively the populations of the inner city.

While urging the programs in the field of education a special word of recognition and commendation must be offered to the faculties and staffs of the University for their excellent record of interest in the preparation of thousands of bachelor's and master's candidates for teaching in the schools of the City of New York and of the State. Examination of the programs offered and contemplated reflects a sensitivity to the changing conditions in the classroom and the pupils who must be served.

In describing the process under which new programs for the community colleges are studied, approved, and offered, City University's Interim Revision uses four meaningful categories. Future reports should include a description not only of the categories but of the measures used to evaluate the need for a new curriculum and the relationship of the program in any one of the units of the University to other institutions.

With regard to the development of community colleges, the 1967 Master Plan Revision lists all of the community college programs that are approved but not yet offered, and those in stages of development or preliminary consideration. Realizing the large population base, the complex nature of the economic, social, and cultural life of New York City, the general relationship between the demand for educational services on the one hand and the provision of such services on the other, results in such a wide gap that all the programs mentioned can safely be given further consideration and development. The Regents encourage the officers of the City University to proceed with their work in this regard.

In connection with the development of new programs, however, attention is called to the remarks about community college and agricultural and technical curricular development in the section of this report pertaining to State University. Specific reference is made to the necessity of developing cooperative arrangements under which officers of secondary schools initiating vocational and adult programs communicate with representatives of higher education institutions before such programs are initiated. The same obligation holds equally for officers of the units of the City University in that they should develop reciprocal arrangements with officers of secondary schools before vocationally related programs are developed in the community colleges. Cooperative consultation is a prerequisite to the development and establishment of programs that will operate in a complementary and efficient relationship. It is requested that the 1968 Report of the City University provide information on progress made in connection with this request.

The reference in the Community College section to a serious study of a University-wide approach to Language and Area Studies is commended.

Medical Education

At the time the interim revision was prepared the possibility of an affiliation between the University and an existing medical school was still under study. During the summer, however, an agreement was reached between the officers of the City University and those of the Mount Sinai School of Medicine. This association will bring into a coordinated working relationship the very considerable resources of the two institutions in the field of study for the Doctor of Medicine and in a variety of areas of study leading to the Doctor of Philosophy. Resources for research and special study will also be available in a particularly effective manner.

The affiliation of the City University and the Mount Sinai School of Medicine has been approved by the Regents.

The interim revision also deals at length with the importance of establishing a City University Health Careers Center. Through this development an ambitious attempt will be made to meet some of the severe shortages that exist in the health manpower field that affect the City and State. The Regents encourage the members of the Board and officers of the University to develop a Health Careers Center and to submit specific proposals concerning developments, as appropriate.

Service for the Disadvantaged

City University has now developed three major programs that serve 3,600 disadvantaged students. The number enrolled is modest in relation to the need, but in the short time that programs have been created it is a very considerable achievement.

In these programs an effort is made to seek out students in the ninth grade and give them special assistance so that they can qualify for the colleges their capabilities suggest. Another phase of this program called "College Discovery" makes it possible for high school graduates, whose grades have not reflected their true potential, to enter community colleges and complete work toward an associate degree.

The special "SEEK" program financed by the State Legislature and the Board of Higher Education made it possible to enroll over 1,200 students in all branches of the University drawing high school graduates who resided in poverty areas in the City. Through a broad program of guidance and financial assistance, these students are helped to continue their education or improve their vocational skills.

In considering educational opportunity, a proposal is made that the City University accept a role for educational development in Harlem. This is an imaginative proposal tuned to the needs of the City at this time. It is hoped that considerable progress can be made on this subject.

Interim Revision of the City University of New York Master Plan for Libraries, 1967

It is obvious that the libraries of City University have been working closely and extensively together under the leadership of the Council of Chief Librarians recently chaired by Bernard Kreissman of City College. This fact is underscored by the Downs' survey of library personnel, the Reichmann and Stephens' feasibility study of cooperative procedures, and the compilation of the City University Union List of Periodicals by Professor Margaret K. Rowell.

The 13 libraries located at 16 separate locations are growing at a steady pace, and university officials must be commended for their efforts, but the report fails to point out plans for strengthening the collections or the maximum size that the collections will develop in the various units. Almost half of the collection is at City College. Although there are no barriers to faculty and graduate students who wish to borrow books and materials from any of the units, at the same time, undergraduate students do not have the same privileges. It is recommended that City University should be more specific in outlining plans to take care of undergraduate library needs.

Unquestionably, colleges and universities must be able to meet the needs of their undergraduates, but when it comes to the development of collections for faculty, graduate study and research, it is desirable to avoid unnecessary duplication at the four largest units, City College, Brooklyn College, Queens College, and Hunter College. The major units should participate in cooperative book selection and cooperative purchasing. Cooperative collection planning will give the major library units collections which will complement rather than duplicate each other.

In addition to increased emphasis on cooperative planning, book selection, and purchasing by the four major units, since all four are members of the 3-R's System of New York City, (the New York Metropolitan Reference and Research Library Agency, Inc., better known as METRO), it is strongly recommended that these institutions work closely within the framework of METRO's plans for acquisitions development and especially with any new programs for physical access or technological access to the untapped resources of the highly specialized libraries in the area, when access (physical, facsimile or electronic storage) to these resources are available through the evolving METRO program. Improved methods of communications through facsimile transmission and other electronic devices that are being developed through the 3-R's Program will make it possible for these collections to serve as a single great resource for undergraduate as well as graduate students and faculty in City University. It is recommended that the Master Plan indicate an intent to cooperate fully with the Reference and Research Libraries program, particularly with the New York City regional system, METRO.

Cooperative activities of the libraries of City University will be greatly enhanced and strengthened by the appointment of a University Dean for libraries. The officials of the University should be congratulated for planning to create this position which will provide the kind of coordinated library development needed by the University with its libraries scattered all over the city at the various units.

Even with the absence of a chief library administrator for the University, the Council of Chief Librarians has made many significant achievements in cooperative activities, e.g., the liberalized interlibrary loan, truck delivery service between libraries, and the installation of TWX intercommunications at several of the libraries. It is quite evident that the magnitude of cooperative activities initiated by the Council of Chief Librarians played a significant role in the new plans for the appointment of a University Dean for Libraries.

While the four major units of the University have joined METRO and will benefit from their affiliation in the 3-R's, the 2-year colleges have been slow or reluctant to join, and in most instances their collections are the weakest. The rapid growth of their student bodies, and the inexorable growth of their curricula, compound the difficulties of providing adequate library service in these institutions. If the 2-year college libraries are to serve their campuses more effectively, it is recommended that they plug into the vast resources of METRO. It must hastily be made clear, however, that several City University librarians are giving invaluable leadership in METRO as officers and key members and chairmen of important committees that are working diligently to improve reference and research library services through the 3-R's.

City University's greatest library potential is its vision and foresight for its goal of seeking "ways of improving coordination with other libraries in the City and the State and taking advantage of technological development......." thus clearly indicating that library service will be coordinated with the 3-R's program.

Evening Division, Continuing Education and Summer Session Programs

In this section the University set forth a series of objectives aimed at giving adult and part-time students the same opportunity as others to achieve their educational goals. The potential, in terms of population to be served, is so large that attention should be given to development of pilot programs in order to obtain more detailed information on program costs and facilities that will be required to achieve these commendable objectives.

Facilities Development

Comments concerning the material presented by City University with regard to facilities are contained in the first section of this report, along with remarks about facilities in the State University and the private institutions. On page 22 of the 1967 Interim Revision of the City University Master Plan, reference is made to the fact that if enrollment goals are to be achieved, the facilities proposed must be provided. This is a reminder well worth keeping before all concerned.

Faculty and Staff Development

The keynote of the chapter is expressed in the sentence, "The provision of arrangements and conditions which will facilitate effective teaching and counseling of students, research and growth in a chosen profession, and participation in the development of the institution are as essential as the salaries and benefits necessary to compete with superior institutions in a nationwide or worldwide market."

In these days of relatively high mobility on the part of faculty members, the reference to the need to improve the flexibility of the retirement system is highly important. Continued attention should be given to this matter.

One of the major considerations characteristic of the academic life is the provision of tenure to qualified members of the faculty. It is noted with interest that a careful study is being undertaken, and serious consideration will be given to any recommendations that result from the study.

The section on the student personnel services lists objectives in terms of the ratio of students to professional counselors. The suggestions realistically make a distinction in the requirements for full-time students as against those in special programs such as "College Discovery" and "SEEK". It would be helpful to have some background information on the studies that led the Council of Deans of Students to set these particular objectives.

In making reference to the planning process, attention is called to the necessity of involving members of the faculty and the University community in the planning process itself. The Chancellor and members of the staff are to be congratulated for the establishment of planning procedures on each campus. Planning for higher education, by its special nature, requires cooperative effort if it is to be successful.

Enrollment Goals and Policies

In 1966, the Board of Higher Education established a long-range enrollment goal by stating its determination "to offer the benefits of post-high school education to all residents of New York City who are able and eager to avail themselves of these benefits."

It is encouraging to note that the City University did achieve its goal of offering admission to one-fourth of the high school students who graduated in June 1966. This achievement was made possible by utilizing existing permanent and temporary facilities, and by the opening of five City University College Centers. After one year of experience with this new policy, the enrollment projections for the senior colleges have been revised upward on the basis of increased retention rates.

To facilitate long-range planning, projections of graduate students at the senior colleges and the Graduate Center should also be provided for the period to 1975.

Relationships to Other Institutions

In this chapter the City University describes some of the relationships that exist or are being developed with other institutions including the State University system. While commending the officers of the University and the Board of Higher Education on what has been achieved, it must at the same time be remarked that the record of active cooperation among some or all the institutions of the State in pooling their resources to meet acute educational needs is not an impressive one. This remark would apply equally to the State University, the City University and to the private institutions.

In commenting upon progress made by the City University during the past year, special note should be taken of the visit during 1967 of the Commission on Institutions of Higher Education of the Middle States Association of Colleges and Secondary Schools. Their visitation, the first since the University had achieved its present organizational status, resulted in a vote to reaffirm the accreditation of the University and to call it a "first rate institution."

APPENDIX

Table 1

College and University Salaries in New York

A. Salaries

		1964-65	1965-66	1966-67
I. Complex Universities				
City University of New York				
Average Salary		$11,694	$12,123	$12,235
Range of Institution Averages	High	12,185	12,460	13,459
	Low	11,182	11,125	12,539
Annual Change	Amount	—	429	1,112
	Index	100	104	113
State University of New York				
University Centers				
Average Salary		10,230	10,719	11,731
Range of Institution Averages	High	11,632	11,008	12,033
	Low	9,793	10,181	11,231
Annual Change	Amount	—	489	1,012
	Index	—	105	115
Private Universities				
Average Salary		11,224	11,741	12,425
Range of Institution Averages	High	12,836	13,357	13,363
	Low	8,808	9,061	9,968
Annual Change	Amount	—	517	684
	Index	100	105	110
II. Four Year Institutions				
State University of New York[1]				
Four Year Institutions				
Average Salary		9,080	9,456	10,249
Range of Institution Averages	High	9,505	9,643	10,587
	Low	9,001	9,149	9,919
Annual Change	Amount	—	376	793
	Index	100	104	113
Private Colleges				
Average Salary		8,623	9,059	9,630
Range of Institution Averages	High	10,312	10,380	10,993
	Low	6,829	7,202	7,274
Annual Change	Amount	—	376	571
	Index	100	105	112

[1] Excludes contract colleges and specialized colleges.

Table 1 Continued

	1964-65	1965-66	1966-67
III. Two Year Colleges			
State University of New York			
Agricultural & Technical Colleges			
Average Salary	$ 8,966	$ 9,052	$ 9,616
Range of Institution Averages			
High	9,301	9,276	9,854
Low	8,212	8,424	9,083
Annual Change			
Amount	———	86	564
Index	100	101	107

College and University Compensations in New York*

B. Compensations

	1964-65	1965-66	1966-67
I. Complex Universities			
City University of New York			
Average Compensation	$11,869	$12,401	$13,751
Range of Institution Averages			
High	12,359	12,737	14,029
Low	11,356	11,403	13,069
Annual Change			
Amount	———	532	1,350
Index	100	104	116
State University of New York			
University Centers			
Average Compensation	11,453	12,463	13,703
Range of Institution Averages			
High	11,862	12,807	14,038
Low	10,939	11,839	13,197
Annual Change			
Amount	———	1,010	1,240
Index	100	109	120
Private Universities			
Average Compensation	12,559	13,250	14,109
Range of Institution Averages			
High	14,396	15,146	15,762
Low	9,036	9,847	10,824
Annual Change			
Amount	———	691	859
Index	100	106	109
II. Four-Year Institutions			
State University of New York			
Four-Year Institutions[1]			
Average Compensation	10,289	11,006	11,899
Range of Institution Averages			
High	10,623	11,220	12,352
Low	10,070	10,652	11,583
Annual Change			
Amount	———	717	893
Index	100	107	116

*Salary plus fringe benefits.

[1] Excludes contract colleges and specialized colleges.

Table 1 Continued

		1964-65	1965-66	1966-67
Private Colleges				
Average Compensation		$ 9,567	$10,121	$10,718
Range of Institution Averages				
	High	14,443	14,977	15,552
	Low	7,184	7,691	7,779
Annual Change				
	Amount		554	575
	Index	100	106	112
III. Two-Year Colleges				
State University of New York				
Agricultural & Technical Colleges				
Average Compensation		10,026	10,542	11,233
Range of Institution Averages				
	High	10,398	10,799	11,510
	Low	9,180	9,819	10,615
Annual Change				
	Amount		516	1,207
	Index	100	105	113

Source: American Association of University Professors Bulletin, 51 (285-288) June 1965; 52 (179-181) June 1966; 53 (177-180) June 1967.

COMPLEX UNIVERSITIES

City University of New York
- Brooklyn College
- City College
- Hunter College
- Queens College

State University of New York
- at Albany
- at Binghamton
- at Buffalo
- at Stony Brook

Private Complex Universities
- Columbia University (Incl. Teachers Coll.)
- Cornell University
- Fordham University
- New York University
- Rensselaer Polytechnic Institute
- Syracuse University (Incl. Coll. Lib. Arts)
- University of Rochester
- Yeshiva University

Four Year Institutions

State University of New York, Colleges at
- Brockport
- Buffalo
- Cortland
- Fredonia
- Geneseo
- New Paltz
- Oneonta
- Oswego
- Plattsburgh
- Potsdam

Private Four Year Institutions

Adelphi University
Alfred University
Bard College
Canisius College
Clarkson College of Technology
Colgate University
College of New Rochelle
College of St. Rose
Cooper Union
D'Youville College
Hamilton College
Hartwick College
Hobart & William Smith
Hofstra University
Iona College
Ithaca College
Long Island University
Manhattan College
Manhattanville College
Notre Dame College of Staten Island
Pace College
Polytechnic Institute of Brooklyn
Pratt Institute
Rosary Hill College
St. Bernardine of Siena College
St. Francis College
St. John Fisher College
St. Lawrence University
Skidmore College
Union College & University
Union Theological Seminary
U. S. Merchant Marine Academy
Vassar College
Wagner College
Wells College
St. John's University
Barnard College
Utica College of Syracuse University

Table 2
New York State College and University Enrollment Projections
Comparison of Degree Credit Enrollments
Fall 1965 and Fall 1966*

	ENROLLMENT						Percent Change 1965 to 1966		
	Full-Time		Part-Time		Total				
	1965	1966	1965	1966	1965	1966	Full-Time	Part-Time	Total
Four-Year Colleges	283,773	304,359	180,940	179,151	464,713	483,510	7.3	-1.0	4.0
Private	179,218	191,780	104,500	102,585	283,718	294,365	7.0	-1.8	3.8
Public	104,555	112,579	76,440	76,566	180,995	189,145	7.7	.2	4.5
CUNY	45,580	48,355	59,495	58,856	105,075	107,211	6.1	-1.1	2.0
SUNY	58,975	64,224	16,945	17,710	75,920	81,934	8.9	4.5	7.9
Two-Year Colleges	54,525	61,078	50,478	57,585	105,003	118,663	12.0	14.1	13.0
Private	5,752	6,228	1,296	1,487	7,048	7,715	8.3	14.7	9.5
Public	48,773	54,850	49,182	56,098	97,955	110,948	12.5	14.1	13.3
Ag. & Tech. Colleges	8,960	9,783	3,847	4,059	12,807	13,842	9.2	5.5	8.1
Community Colleges	39,813	45,067	45,335	52,039	85,148	97,106	13.2	14.8	14.0
New York City	11,917	13,702	18,384	20,009	30,301	33,711	15.0	8.8	11.3
Other	27,896	31,365	26,951	32,030	54,847	63,395	12.4	18.8	15.6
New York State Total	338,298	365,437	231,418	236,736	569,716	602,173	8.0	2.3	5.7
Total Private	184,970	198,008	105,796	104,072	290,766	302,080	7.0	-1.6	3.9
Total Public	153,328	167,429	125,622	132,664	278,950	300,093	9.2	5.6	7.6
Total CUNY	45,580	48,355	59,495	58,856	105,075	107,211	6.1	-1.1	2.0
Total SUNY	107,748	119,074	66,127	73,808	173,875	192,882	10.5	11.6	10.9

***Preliminary Data**

Source:College & University Enrollment, New York State, Fall 1966, Preliminary Survey, December 1966. Bureau of Statistical Services

Table 3

Comparison of New York College and University Full-Time Enrollment

Actual 1965-1966 and Projected 1966

	ACTUAL ENROLLMENT[1]		PROJECTED ENROLLMENT[2]
	1965	1966	1966
4-Year Colleges	283,773	304,359	307,200
Private	179,218	191,780	191,400
Public	104,555	112,579	115,600
CUNY	45,580	48,355	50,300
SUNY	58,975	64,224	65,300
2-Year Colleges	54,525	61,078	63,800
Private	5,752	6,228	6,300
Public	48,773	54,850	57,600
Ag. & Tech.	8,960	9,783	9,700
Comm. Coll.	39,813	45,067	47,900
NYC	11,917	13,702	15,300
Other	27,896	31,365	32,600
Total	338,298	365,437	371,000
Private	184,970	198,008	197,700
Public	153,328	167,429	173,200
CUNY	45,580	48,355	50,300
SUNY	107,748	119,074	122,900

1. College and University Enrollment in New York State Preliminary Survey - Bureau of Statistical Services
2. Actual and Projected Enrollment in New York State Institutions of Higher Education, 1966 - Office of Planning in Higher Education

METHODOLOGY SUMMARY FOR 1967 ENROLLMENT PROJECTIONS
FOR NEW YORK STATE TO 1980

	Input Rate in New York Colleges*		Undergraduate to Graduate Ratio		Annual Change in Migration Pattern
	Time Interval	Average Annual Increase			
1. Minimum	5 year	0.9	1967-81	10.5:1	None
2. Basic	3 year	1.1	1967-68	10.0:1	None
			1968-69	9.5:1	
			1969-81	9.0:1	
3. Proposed	3 year	1.3	1967-68	10.0:1	.2**
			1968-69	9.5:1	
			1969-81	9.0:1	

*The relationship of the high school graduates over a four-year prior period to the full-time undergraduate enrollment in the colleges and universities in New York State. The College Input Rate was calculated to be 38.6 for the year 1966.

**This migration change assumes that in addition to New York residents tending to enroll in New York State colleges and universities to a greater degree than formerly, out of state residents will tend to be attracted to New York institutions to a greater degree as well. This change is assigned a weight of 0.2 and is then added to the New York College Input Rate of the basic projection resulting in an annual increase of 1.3.

Office of Planning in Higher Education

Table 4

New York State College and University Enrollment Projections
Minimum, Basic and Proposed Full-Time Projections

1967-1975

Year	Minimum Projection	Basic Projection	Proposed Projection
1967	399,400	402,900	404,800
1968	416,100	423,500	427,400
1969	433,200	445,000	451,000
1970	458,000	472,500	480,700
1971	481,300	498,500	509,100
1972	505,500	525,500	538,600
1973	528,300	551,200	566,900
1974	551,400	577,300	595,700
1975	577,600	606,800	628,000
1976	602,200	634,700	659,000
1977	623,400	659,100	686,300
1978	641,400	680,800	710,800
1979	659,100	701,000	733,800
1980	673,800	718,600	754,100

NOTE:

Minimum- College Input Rate Annual Increase 0.9 Undergraduate to Graduate Ratio 10.5:1

Basic- College Input Rate Annual Increase 1.1 Undergraduate to Graduate Ratio 9:1

Proposed- College Input Rate Annual Increase 1.3 Undergraduate to Graduate Ratio 9:1

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Table 5-A
NEW YORK STATE COLLEGE AND UNIVERSITY ENROLLMENT PROJECTIONS
Full-Time Projection by Type & Control of Institution
1967-1980
(In Thousands)

A. MINIMUM PROJECTION	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1980-81
Four-Year Colleges	326.71	336.21	345.26	359.99	373.01	386.20	397.81	409.14	422.80	471.66
Private	200.50	202.64	204.47	209.76	215.62	221.41	226.11	230.49	236.24	249.31
Public	126.21	133.57	140.79	150.22	157.39	164.79	171.70	178.65	186.57	222.35
CUNY	54.72	57.84	61.08	65.49	67.38	69.25	70.79	72.23	73.93	87.59
SUNY	71.49	75.73	79.71	84.73	90.00	95.54	100.91	106.42	112.63	134.76
Two-Year Colleges	72.69	79.89	87.94	98.01	103.30	119.30	130.49	142.26	154.80	202.14
Private	7.19	7.49	8.23	9.16	9.63	10.11	10.57	11.03	11.55	13.48
Public	65.50	72.40	79.71	88.85	98.67	109.19	119.92	131.23	143.25	188.66
Ag. & Tech. Colleges	9.99	10.40	10.83	11.45	12.03	12.64	13.74	14.34	15.02	20.21
Community Colleges	55.52	62.00	68.88	77.40	86.63	96.55	106.72	116.90	128.23	168.45
New York City	18.37	21.22	24.26	27.94	32.25	36.90	41.21	45.77	50.83	67.38
Other	37.14	40.78	44.62	99.46	54.87	60.15	65.51	71.13	77.40	101.07
New York State Total	399.40	416.10	433.20	458.00	481.30	505.50	528.30	551.40	577.60	673.80
Total Private	207.69	210.13	212.70	218.92	225.25	231.52	236.52	241.51	247.79	262.78
Total Public	191.71	205.97	220.50	239.08	256.05	273.98	291.62	309.89	329.81	411.02
Total CUNY	54.72	57.84	61.08	65.49	67.38	69.25	70.79	72.23	73.93	87.59
Total SUNY	136.99	148.13	159.42	173.58	188.67	204.73	220.83	237.65	255.88	323.42

Projection based on College Input Rate of 38.9 with Annual Incremental Increase of 0.9, and Undergraduate-Graduate Ratio of 10.5.
Distribution based on Table 5

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Table 5-B

New York State College and University Enrollment Projections

Full-Time Projection by Type & Control of Institution

1967-1980

(In Thousands)

B. BASIC PROJECTION	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1980-81
Four-Year Colleges	329.57	342.22	354.69	371.38	386.33	401.49	415.06	428.38	444.15	503.01
Private	202.25	206.27	210.05	216.40	223.32	230.17	235.92	241.32	248.17	265.88
Public	127.31	135.96	144.63	154.98	163.01	171.32	179.14	187.06	195.98	237.13
CUNY	55.20	58.87	62.75	67.57	69.79	71.99	73.86	75.63	77.67	93.42
SUNY	72.12	77.09	81.89	87.41	93.22	99.32	105.28	111.43	118.32	143.72
Two-Year Colleges	73.33	81.32	90.34	101.11	112.16	124.02	136.15	148.95	162.61	215.58
Private	7.25	7.62	8.46	9.45	9.97	10.51	11.02	11.55	12.14	14.37
Public	66.07	73.70	81.89	91.66	102.19	113.51	125.12	137.41	150.48	201.20
Ag. & Tech. Coll.	10.07	10.59	11.13	11.81	12.46	13.14	14.33	15.01	15.78	21.56
Community Coll.	56.00	63.11	70.76	79.85	89.73	100.37	111.34	122.39	134.70	179.65
New York City	18.53	21.60	24.92	28.82	33.40	38.36	42.99	47.92	53.40	71.86
Other	37.47	41.51	45.84	51.03	56.83	62.54	68.35	74.48	81.31	107.79
New York State Total	402.89	423.54	445.03	472.50	498.49	525.51	551.21	577.33	606.76	718.58
Total Private	209.50	213.89	218.51	225.85	233.29	240.68	246.94	252.87	260.30	280.25
Total Public	193.39	209.65	226.52	246.64	265.20	284.83	304.27	324.46	346.46	438.34
Total CUNY	55.20	58.87	62.75	67.57	69.79	71.99	73.86	75.63	77.67	93.42
Total SUNY	138.20	150.78	163.77	179.08	195.41	212.83	230.40	248.83	268.80	344.92

Note: Projections based on 1966 Base College Input Rate of 38.9 with Annual Incremental Increase of 1.1, and Undergraduate-Graduate Ratio of 10.0 for 1967-68, 9.5 for 1968-69, and 9.0 for 1969-1981. Distribution based on Table 5.

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Table 5-C
New York State College and University Enrollment Projections
Full-Time Projection by Type & Control of Institution
1967-1980
(In Thousands)

C. PROPOSED PROJECTION

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1980-81
Four-Year Colleges	331.47	346.11	360.65	379.61	396.93	414.59	430.72	443.07	465.43	538.52
Private	202.25	206.27	210.05	216.40	223.32	230.17	235.92	241.32	248.17	265.88
Public	129.21	139.85	150.59	163.21	173.61	184.42	194.80	205.42	217.26	272.64
CUNY	55.56	59.65	63.94	69.22	71.91	74.61	76.99	79.30	81.93	100.52
SUNY	73.64	80.20	86.66	93.99	101.70	109.80	117.81	126.12	135.34	172.13
Two-Year Colleges	73.33	81.32	90.34	101.11	112.16	124.02	136.15	148.95	162.61	215.58
Private	7.25	7.62	8.46	9.45	9.97	10.51	11.02	11.55	12.14	14.37
Public	66.07	73.70	81.89	91.66	102.19	113.51	125.12	137.41	150.48	201.20
Ag. & Tech. Coll.	10.07	10.59	11.13	11.81	12.46	13.14	14.33	15.01	15.78	21.56
Community Colleges	56.00	63.11	70.76	79.85	89.73	100.37	111.34	122.39	134.70	179.65
New York City	18.53	21.60	24.92	28.82	33.40	38.36	42.99	47.92	53.40	71.86
Other	37.47	41.51	45.84	51.03	56.83	62.54	68.35	74.48	81.31	107.79
New York State Total	404.49	427.43	450.99	480.73	509.09	538.61	566.87	595.69	628.04	754.09
Total Private	209.50	213.89	218.51	225.85	233.29	240.68	246.94	252.87	260.30	280.25
Total Public	195.29	213.54	232.48	254.87	275.80	297.93	319.93	342.82	367.94	473.85
Total CUNY	55.56	59.65	63.94	69.22	71.91	74.61	76.99	79.30	81.93	100.52
Total SUNY	139.72	153.78	170.35	187.56	203.89	223.31	242.93	263.52	285.82	373.33

Note: Projection based on 1966 Base College Input Rate of 38.9 with Annual Incremental Increase of 1.3, and Undergraduate-graduate Ratio of 10.0 for 1967-68, 9.5 for 1968-69, and 9.0 for 1969-1981. Distribution based on Table 5 and increase in College Input Rate Apportioned entirely to public sector.

10/5/67 - Office of Planning in Higher Education

ENROLLMENT METHODOLOGY

For Use with Tables 4 and 5

The methodology is based on:

1. An inductive method.
2. The relationship of high school graduates cumulated over a prior four year period to the undergraduate enrollment - (New York College Input Rate).
3. The relationship of undergraduate to graduate enrollment excluding first professional.
4. An annual increase in first professional enrollment of 1000 students to a figure of 20,000 which is then held constant.
5. An unclassified enrollment figure held constant at 10,000.
6. Three projections were developed, the Minimum, Basic, and Proposed; variations in technique are shown on the following page.

The inductive approach refers to the fact that the total enrollment is the result of the summation of projections of undergraduate, graduate, first professional and unclassified enrollments.

The relationship of the high school graduates over a four-year prior period to the full-time undergraduate enrollment in New York State has been labled the New York College Input Rate. In 1966, the New York College Input Rate was calculated to be 38.6. This means that in 1966 the undergraduate enrollment in New York colleges and universities was equivalent to a figure that amounted to 38.6% of the high school graduates cumulated over a prior four-year period.

The undergraduate figures in the Minimum Projection are based on an annual increase in the New York College Input Rate of 0.9, which is based on the average annual increase over the past five years. The undergraduate figures in the Basic Projection are based on an annual increase of 1.1, which is based on the average annual increase over the past three years. The annual increase in the New York College Input Rate for the Proposed Projection is 1.3. This is based on an assumed change in migration patterns of students or their equivalent. This change assumes that in addition to New York residents tending to enroll in New York State colleges and universities to a greater degree than formerly, out of state residents will tend to be attracted to New York colleges to a greater degree as well.

The graduate figure of the Minimum Projection assumes no change in the undergraduate to graduate ratio existing in 1966. This ratio was 10.5:1. The Basic Projection assumes that the undergraduate to graduate ratio will not stabilize at 10.5:1 but will continue to decrease at the recent rate of 0.5 and will stabilize at a figure of 9:1. The undergraduate to graduate ratio in the Proposed Projection is the same as used in the Basic Projection, i.e., 9:1.

Table 6

PHYSICAL FACILITIES CONSTRUCTED BY NEW YORK STATE INSTITUTIONS OF HIGHER EDUCATION DURING THE LAST FIVE YEARS

(Academic Years 1961-62 through 1965-66)

Type of Institution	Additions to Physical Plant (Thousands of Dollars)					Source of Funds (Thousands of Dollars)			
	Academic Facilities	Auxiliary Facilities*	Supporting Facilities**	Equipment	Totals	Federal	State & Local	Private	Totals
State University of New York									
Two-Year Institutions	159,141****	21,422	17,169	24,494	222,226	25,000	197,226	-	222,226
(Ag. & Tech. & Comm. Coll.)									
Four-Year Inst.	323,283	140,393	108,331	81,341	653,348	22,000	631,348	-	653,348
(Centers & Coll.)	482,424	161,815	125,500	105,835	875,574	47,000	828,574	-	875,574
SUBTOTAL									
City University of New York									
Two-Year Institutions	***	***	***	***	***	***	***	***	***
Four-Year Institutions	19,767	1,716	1,800	1,956	25,239	-	23,908	1,331	25,239
SUBTOTAL	19,767	1,716	1,800	1,956	25,239	-	23,908	1,331	25,239
Combined Public									
Two-Year Institutions	159,141	21,422	17,169	24,494	222,226	25,000	197,226	-	222,226
Four-Year Institutions	343,050	142,109	110,131	83,297	678,587	22,000	655,256	1,331	678,587
SUBTOTAL	502,191	163,531	127,300	107,791	900,813	47,000	852,482	1,331	900,813
Combined Private									
Two-Year Institutions	8,979	11,626	6,874	4,190	31,669	3,300	6,790	21,579	31,669
Four-Year Institutions	173,902	210,469	134,150	50,895	569,416	122,008	52,008	395,400	569,416
SUBTOTAL	182,881	222,095	141,024	55,085	601,085	125,308	58,798	416,979	601,085
Public and Private									
Two-Year Institutions	168,120	33,048	24,043	28,684	253,895	28,300	204,016	21,579	253,895
Four-Year Institutions	516,952	352,578	244,281	134,192	1,248,003	144,208	707,264	396,731	1,248,003
GRAND TOTAL	685,072	385,626	268,324	162,876	1,501,898	172,308	911,280	418,310	1,501,898

*Auxiliary (Residential; Dining; Student Union)

**Supporting Facilities (Land; Other Educational and General Facilities)

***No Data Available.

****Entry Estimated from Best Sources Available

Source: Higher Education General Information Survey 1966-67 (OE-2300-6) Schedule V - Additions to Physical Plant

October-1967

Table 7

FIVE-YEAR PROJECTION OF PHYSICAL FACILITIES NEEDS BY NEW YORK STATE INSTITUTIONS OF HIGHER EDUCATION

(Academic Years 1966-67 through 1970-71)

Type of Institution	Additions to Physical Plant (Thousands of Dollars) Academic Facilities	Auxiliary Facilities*	Supporting Facilities**	Equipment	Totals	Source of Funds (Thousands of Dollars) Federal	State & Local	Private	Totals
State University of New York									
Two-Year Institutions (Ag. & Tech. & Comm. Coll.)	250,279***	12,729	17,826	47,732	328,566	67,000	261,566	-	328,566
Four-Year Institutions (Centers & Colleges)	399,623	167,093	179,562	232,443	978,721	53,200	925,521	-	978,721
SUBTOTAL	649,902	179,822	197,388	280,175	1,307,287	120,200	1,187,087	-	1,307,287
City University of New York									
Two-Year Institutions	144,465***	-	-	-	144,465	4,049	140,416	-	144,465
Four-Year Institutions	178,491	4,095	10,247	10,507	203,340	5,700	194,461	3,179	203,340
SUBTOTAL	322,956	4,095	10,247	10,507	347,805	9,749	334,877	3,179	347,805
Combined Public									
Two-Year Institutions	394,744	12,729	17,826	47,732	473,031	71,049	401,982	-	473,031
Four-Year Institutions	578,114	171,188	189,809	242,950	1,182,061	58,900	1,119,982	3,179	1,182,061
SUBTOTAL	972,858	183,917	207,635	290,682	1,655,092	129,949	1,521,964	3,179	1,655,092
Combined Private									
Two-Year Institutions	4,903	10,927	8,311	1,577	25,718	4,799	2,300	18,619	25,718
Four-Year Institutions	494,701	319,024	233,591	83,561	1,130,877	307,304	145,422	678,151	1,130,877
SUBTOTAL	499,604	329,951	241,902	85,138	1,156,595	312,103	147,722	696,770	1,156,595
Public and Private									
Two-Year Institutions	399,647	23,656	26,137	49,309	498,749	75,848	404,282	18,619	498,749
Four-Year Institutions	1,072,815	490,212	423,400	326,511	2,312,938	366,204	1,265,404	681,330	2,312,938
GRAND TOTAL	1,472,462	513,868	449,537	375,820	2,811,687	442,052	1,669,686	699,949	2,811,687

*Auxiliary (Residential; Dining; Student Union)
**Supporting Facilities (Land; Other Educational and General Facilities)
***Entry Estimated from Best Sources Available

Source: Higher Education General Information Survey 1966-67 (OE-2300-6) Schedule V - Additions to Physical Plant

October-1967

ADDITIONAL PLANS FOR NEW FACILITIES, 1967-72

CITY UNIVERSITY

	Unit	Full Time Day Session Matriculant Additional Enrollment Fall 1972)(Fall 1963	Project	Additional Area Sq. Ft.	Completion Year	Total Expenditure
A.[1]	Brooklyn College		Land Acquisition			$ 1,000,000
B.[2]	York College Enrollment: Fall 1963 None Goal: Fall 1972 5,000	5,000	New Facilities	1,300,000	1972	52,000,000
C.[3]	Richmond College Enrollment: Fall 1963 None Goal: Fall 1972 5,000	5,000	New Facilities	1,300,000	*	52,000,000
D.[4]	**City College**		**Land Acquisition**			**4,000,000**
E.[5]	Bronx Community College Enrollment, Fall 1963: 1,200 Goal, Fall 1972: 5,000 Temporary Classrooms, 1963: 5	3,800	New Facilities	692,000	1972	~~43,500,000~~ **44,000,000**
F.[6]	Borough of Manhattan Community College Enrollment: Fall 1963 None Goal: Fall 1972—3,500 Fall 1974—5,000 Temporary Classrooms, 1964: All	3,500	New Facilities	800,000	1972	35,000,000

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[1] Supplements Line 4, page 45, 1966 Revision.

[2] Replaces Line 13, page 45, 1966 Revision.

[3] Replaces Line 14, page 45, 1966 Revision.

[4] ~~This line not used~~. **Supplements Line 2, Page 45, 1966 Revision**

[5] Replaces Line 8, page 45, 1966 Revision.

[6] Replaces Line 12, page 45, 1966 Revision.

Taken from the 1967 Interim Revision, City University of New York Master Plan

ADDITIONAL PLANS FOR NEW FACILITIES, 1967-72 (cont'd)

CITY UNIVERSITY

Unit	Full Time Day Session Matriculant Additional Enrollment Fall 1972)(Fall 1963	Project	Additional Area Sq. Ft.	Completion Year	Total Expenditure
G.[7] Queensborough Community College		Nursing Education	128,000	1971	$ 5,120,000
H.[8] New York City Community College		Site Acquisition			7,000,000
I.[9] Temporary Facilities†			*	*	20,000,000
J.[10] Student Housing†			*	*	*
K.[10] Faculty and Staff Housing†			*	*	*
L.[10] Chancellor's and Presidents' Housing†			*	*	1,200,000
M.[10] Parking Facilities†			*	*	*
N.[10] New Community College	**5,000**	New Facilities	800,000	1972	32,000,000
O.[10] Ancillary Activities			100,000	1969	4,000,000
P.[10] Reconstruction, Rehabilitation, Improvement*†					800,000
Q. Mt. Sinai School of Medicine		Basic Science Program	80,000	1968	6,800,000

[7] Supplements Line 9, page 45, 1966 Revision.
[8] Supplements Line 10, page 45, 1966 Revision.
[9] Replaces Line 16, page 45, 1966 Revision.
[10] Supplements schedule on page 45, 1966 Revision.
* Data to follow.
† At all units of the University.

Taken from the 1967 Interim Revision, City University of New York Master Plan

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Associate Commissioner for Higher and Professional Education

ROBERT H. McCAMBRIDGE
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1966
PROGRESS REPORT
# of the
BOARD OF REGENTS
on
The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

1784

JC 670 353

The University of the State of New York
The State Education Department
Albany, New York 12224

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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1966
PROGRESS REPORT
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BOARD OF REGENTS
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The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

1784

The University of the State of New York
The State Education Department
Albany, New York 12224

THE UNIVERSITY OF THE STATE OF NEW YORK

REGENTS OF THE UNIVERSITY
(with years when terms expire)

Edgar W. Couper, A.B., LL.D., L.H.D., Chancellor	Binghamton,	1968
Thad L. Collum, C.E., Vice Chancellor	Syracuse,	1967
Alexander J. Allan, Jr., LL.D., Litt.D.	Troy,	1978
Charles W. Millard, Jr., A.B., LL.D.	Buffalo,	1973
Everett J. Penny, B.C.S., D.C.S.	White Plains,	1970
Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S.	Purchase,	1972
Edward M. M. Warburg, B.S., L.H.D.	New York,	1975
Joseph W. McGovern, A.B., LL.B., L.H.D., LL.D.	New York,	1969
Joseph T. King, A.B., LL.B.	Queens,	1977
Joseph C. Indelicato, M.D.	Brooklyn,	1974
Mrs. Helen B. Power, A.B., Litt.D.	Rochester,	1976
Francis W. McGinley, B.S., LL.B.	Glens Falls,	1979
George D. Weinstein, LL.B.	Hempstead,	1981
Max J. Rubin, LL.B., L.H.D.	New York,	1980
Kenneth B. Clark, A.B., M.S., Ph.D.	New York,	1971

PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION
James E. Allen, Jr.

DEPUTY COMMISSIONER OF EDUCATION
Ewald B. Nyquist

ASSOCIATE COMMISSIONER FOR HIGHER
AND PROFESSIONAL EDUCATION
Frank R. Kille

ASSISTANT COMMISSIONER FOR HIGHER
EDUCATION PLANNING
Robert H. McCambridge

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
JAMES E. ALLEN, JR., PRESIDENT OF THE UNIVERSITY
AND COMMISSIONER OF EDUCATION

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JOSEPH W. McGOVERN, NEW YORK
JOSEPH T. KING, QUEENS
JOSEPH C. INDELICATO, M. D., BROOKLYN
HELEN B. POWER, ROCHESTER
FRANCIS W. McGINLEY, GLENS FALLS
GEORGE D. WEINSTEIN, HEMPSTEAD
MAX J. RUBIN, NEW YORK
KENNETH B. CLARK, NEW YORK

EDGAR W. COUPER
FIRST-CITY NATIONAL BANK
BOX 1109
BINGHAMTON, NEW YORK 13902

November 1, 1966

The Hon. Nelson A. Rockefeller
Governor
Executive Chamber
Albany, New York

Dear Governor Rockefeller:

In accordance with Section 237, Subdivision 4, of the Education Law of New York State I am pleased to submit the 1966 Progress Report on the Regents Statewide Plan for the Expansion and Development of Higher Education, 1964. This report consists of three parts: (1) comments and observations on the part of the Regents with regard to higher education in New York, (2) a review and recommendations pertaining to the 1966 Interim Revision of the Master Plan of 1964 for the State University of New York and Progress Report, and (3) a review and action on the Second Interim Revision, 1964 Master Plan for the City University of New York.

I am pleased to inform you that with certain qualifications and comments as set forth in the sections listed above, the Regents approve the interim revisions submitted by the State and City Universities and commend the plans to you for your approval.

Respectfully yours,

E. W. Couper
Chancellor

PART I

PROGRESS REPORT OF THE BOARD OF REGENTS

ON

THE REGENTS STATEWIDE PLAN
FOR THE EXPANSION AND DEVELOPMENT
OF HIGHER EDUCATION, 1964

Part I

1966 PROGRESS REPORT of the Board of Regents on the Regents Statewide Plan for the Expansion and Development of Higher Education, 1964

This report of the Board of Regents consists of three parts (1) A progress report and comments on higher education in New York, (2) A review and recommendations pertaining to the 1966 Interim Revision of the Master Plan of the State University of New York, and (3) A review and comment on the Second Interim Revision, 1964 Master Plan for the City University of New York.

I. EXAMPLES OF PROGRESS IN HIGHER EDUCATION, 1965-1966

During the past year higher education in New York State has been marked by significant progress. Sometimes, in a concern for needs yet to be met there is a tendency to overlook the remarkable achievements that are taking place.

Growth in Enrollments

New York, which enrolls about 10% of all college students in the Nation, has 234 different college and university campuses. Of these, sixty-two campuses are a part or under the supervision of the State University, nine campuses are units of City University, and the rest are privately controlled. Full-time enrollments in these institutions during the fall of 1965 increased an impressive 11% over the previous year. The enrollment growth was distributed among all the institutions. The sector of most rapid growth was the community college where the number of students increased a dramatic 25% over the previous year. The total number of full-time students in all programs reached 338,000, a level about 10% higher than the projection, published as a part of the 1964 Regents Statewide Plan, based on average enrollment trends over the previous five year period. This higher growth rate indicates that the strong interest in higher education, characteristic of our society in the recent past, is continuing. It further suggests that our institutions collectively are demonstrating an ability to respond to the request for admission. Special comment on this point will be found later in the report.

City University - Important Progress

Progress may be measured in many terms, such as new programs and policies, growth of faculty, new buildings, or enrollment. If any single development is to be mentioned as a special achievement during the year, however, it must be the solution to the crisis at City University. This problem above all others presented complex issues of internal organization, finance, and places for students.

When a system of higher education enrolling nearly 55,000 full-time students is threatened, all responsible persons must seek constructive solutions. In an unusual example of the effectiveness of the democratic process, members of both political parties, leaders of government in City and State, members of the Legislature and others joined together with creative and conscientious zeal. In granting additional funds and providing a 50-50 formula for continuing support, the Governor and the Legislature acted to ensure the growth of the system as an integral part of the State's educational resources. The creating of a City University Construction Fund offers the best hope of achieving the $400,000,000 expansion of space needed to accommodate the young people moving steadily upward from the lower schools. New dimensions of educational opportunity were provided through the availability of an additional $1,000,000 for programs aimed at the special needs for disadvantaged youth. A college education is still the avenue of greatest social mobility for the poor and the ambitious.

State University - An Expression of Strength and Vitality

Vitality in every phase of its program characterized the activities of State University during the year past. Under vigorous leadership of President Gould and with strong financial support of the Governor and the Legislature, the University grew at every level from community college to university center. Full-time enrollments increased from 92,600 to 107,700. Distinguished appointments were made to faculty, new programs offered, and the goal of educational service to all the people of the State was reinforced. New educational ventures through short courses including television grew apace with doctoral study and research. A sense of momentum runs clearly through the progress report and, more important, is encountered on every campus.

The Private Colleges and Universities - The Value of Diversity

The importance of the private institutions is not based solely on tradition. For over one hundred fifty years, collectively and individually, they have been a rich resource providing leadership in every field of state and national activity. Paralleling the rapid growth of public higher education, it is to be noted that attendance in private colleges and universities in New York rose from 170,400 to 185,000. Last year these institutions enrolled about 54% of the full-time students in the State.

Among these colleges are numbered some of the finest in the nation. Their libraries and laboratories in many cases represent unique facilities. Of greater importance is the wealth of opportunity they offer to students. They range widely in size, in curricular offerings, and educational philosophy. They offer choices to students, and this variety has special meaning in a democratic society which depends on a search for knowledge in a variety of settings. Without the private colleges, not only would the cost to the taxpayer of higher education in New York be doubled, but the rich diversity of the offerings of these colleges would be lost.

Review of Scholarship Programs

New York State's concern for educational opportunity for young people has long been expressed through the Regents Scholarships, Scholar Incentive Program, and a variety of other programs which recognize that ability to pay continues to be an element of critical importance in determining whether or not the individual can undertake college study. The Regents Scholarship and Fellowship Program has been expanded from $11.7 million awarded to 29,000 recipients in 1960-61, to $28.1 million awarded to 73,000 recipients in 1965-66. Since February of 1962 when the Scholar Incentive Program was established, the number of New York State students given financial aid toward tuition has increased to 202,000 with a total value of $30.5 million. Loans made to students under the Higher Education Assistance Corporation during 1965-66 amounted to $59.4 million. In recent years the Federal government has also developed programs of financial assistance to students, such as: the National Science Foundation Act, the National Defense Education Act, the Higher Education Act, and the National Foundation on the Arts and Humanities Act.

In order to assess the effect of the rapid development of student financial aid, the Regents have initiated a comprehensive study of all forms of such assistance. The report of this study is expected late this fall and will be the basis of proposals for future action.

Study of Manpower

In addition to the individual's desire for higher education, society has a legitimate concern for the availability of trained manpower to meet the requirements of the economy, government and the professions. Increased attention has been given during the past year to the importance of developing better and more precise information on the manpower requirements of society and for providing ways to meet those manpower requirements through educational institutions, in-service and other types of training.

In October 1965, Governor Rockefeller appointed a Special Manpower Committee composed of representatives from a variety of State governmental agencies to collect data on this question. The Education Department has been an active participant and has had a special role in studying sources of supply. The Committee's recommendations will assist educational planning in terms of curricular development and professional education.

One clear and pressing requirement is to relieve the acute shortage of persons in various fields of the health sciences. At the suggestion of the Governor, the State University in conjunction with the Education Department is working to establish a Health Sciences Manpower Resource Center at State University.

3 R Library Program (Reference and Research Library Resources)

As higher education grows and becomes more complex, one characteristic has been an explosion of knowledge and information which are stored in libraries. In 1961 a comprehensive system of library interrelationships was proposed in the report of the Commissioner's Committee on Reference and Research Library Resources. The report, approved by the Board of Regents, received the endorsement of the Governor's Committee on Libraries and the Legislature. As part of the 1966-67 State purposes budget, a sum of $700,000 was appropriated for the initiation of the program.

Procedure and Guidelines for Establishment of New Colleges

Vigorous growth and change in the educational world also present problems of interrelationships. Because the individual colleges and universities of the State collectively represent a single resource, it was recognized in the 1964 Regents Statewide Plan that to establish new institutions or to make major educational changes formal procedures should be developed. Guidelines have been prepared by the State Education Department in consultation with the State Advisory Council on Higher Education and will be distributed in the coming year.

Education of the Disadvantaged

The development of education during the year was not restricted to additional two and four-year colleges. To serve the members of society who are disadvantaged, other programs were established more suited to their needs and the problems they face in their community. Following a suggestion by the Governor, four Urban Centers were created that are administered under the program of the State University and operated by community colleges. These have been located in Harlem, Brooklyn, Buffalo, and Troy. These institutions prepare high school graduates and dropouts for occupations that are in demand in the labor market. The courses vary in length from six weeks to a year or more. The Centers accept a broad relationship with the students and will work to identify job vacancies, consult with representatives of management and labor, follow the work career of graduates to counsel the individual, and improve the effectiveness of the educational offerings in the Centers.

City University, serving the largest urban area in the nation, is faced with the most acute problems of the disadvantaged. The City University has shown remarkable imagination, flexibility, and determination in establishing a range of programs and rapidly putting them into operation. Here are some examples of the operation of the College Discovery Program.

High school students in the ninth grade who are disadvantaged but show some evidence of college ability may be invited to participate in a special program intended to improve their achievement. The program started a year ago with the selection of 575 students. They participate in small classes, get individual attention from teachers, and have the invaluable aid of tutor-mentors, City University students with backgrounds similar to the students. This phase of the program is characterized by a particularly strong partnership between officers of the University and the public school system. In addition to counseling and remedial service, funds are made available by the Community Action Board for transportation, lunches, books, and cultural events. Two-thirds of those who participated passed all subjects by the close of the semester.

For high school graduates there is another phase of the College Discovery Program. This is open to the graduates of all high schools in the City, both public and private. The purpose of the program is to discover students with potential, often by special means. The students are enrolled in about six community colleges of City University. They are given a variety of testing, counseling, and remedial services. There is flexibility not only in admission but with regard to the length of time for completion of their college career.

SECTION II - CRUCIAL QUESTIONS PERTAINING TO THE STATUS AND DEVELOPMENT OF HIGHER EDUCATION

What Will Be the Size of Future Enrollments?

The projection of enrollments involves analysis of many variables. Although precision is impossible, projections based on recent trends are a reasonably reliable guide for future planning.

A recent careful study of such projections indicates that statewide total full-time enrollment will reach higher levels than predicted in the 1964 Plan. See Tables 1, 2, and 3 on pages I, II, and III of the appendix.

Present trends indicate that statewide full-time enrollments between 445,000 and 456,000 can be expected in the fall of 1970. Using the 1965 enrollment as a base of 100%, the growth factor in 1970 will be 135%, up to 173% by 1975, and to 202% by 1980 which represents 692,000 students. In planning for education it must be recognized that enrollment increases are not likely to take place at a steady rate. There will be variations from year to year due to fluctuations in the size of the population group served.

Will the Colleges and Universities Have the Capacity to Accommodate this Projected Enrollment Growth?

In general terms the answer to the question is "Yes". In January of 1966, questionnaires were sent to every college and university in the State asking for plans and enrollment objectives. The colleges were asked to set forth the assumptions upon which the plans were based and the conditions that would be involved in meeting these objectives. The responses varied as to quality, but they did indicate that if the objectives can be realized the individual institutions are planning to accommodate about 492,000 full-time students in the fall of 1970. This compares with the total enrollment that would result from a projection of current trends of about 456,000 (see table 4). If the trend projection is realized it would mean that enrollments would represent about 93% of capacity based on individual plans.

An excess of capacity over enrollment is desirable. A 10% excess of space may be the ideal. This maneuvering room is the result of a normal gap between the wishes of individual students for particular fields of education and spaces available in the particular programs of the colleges. Occupational Therapy, for example, has had room to accommodate more students for some time, but the students have not been electing this field in proportion to the opportunity.

The achievement of the enrollment objectives of the individual institutions is contingent upon the ability to construct buildings, to find the funds to pay for facilities, to hire staff, and other circumstances where achievement will fall behind aspiration. The realization of the goals will depend in part on what institutions can do for themselves and increasingly on what society, from private and public sources, is willing to provide.

How Successful Are Applicants in Gaining Admission to Post-Secondary Education?

Another way to ask the question would have been, "Is there a significant backlog of students who are unable to continue in some form of post-secondary education?" During the summer of 1966 a questionnaire was sent to guidance officers and principals of a sample of public and private high schools representing about 10% of the enrollment and including all sections of the State. Responses indicate that of the June graduates in the top 75% of the graduating classes who applied for admission to college, well over 90% had been successful in obtaining admission to some institution. There are many things that the survey did not determine that it would be interesting to know. It did not indicate the amount of difficulty, time, effort, or worry involved in gaining admission, nor how satisfactory the solution was in terms of the students' ambitions and financial condition, nor whether the students went out of the State. Since these details are important refinements, more information of this kind would be valuable. In broad terms, the study did suggest that the overwhelming proportion of the high school graduates applying to college in June of 1966 was accommodated. This is no cause for complacency. It indicates that reasonable progress is being made in meeting the demand, but as the size of the group grows and as more people seek to enter college, increased opportunities must be provided.

The element of enlarged opportunity is particularly important. Any study based on the experience of those who apply to college neglects those in a large segment of our population who abandoned the idea and the dream long before they became high school seniors. Responses based on college applications do not reflect the condition of those who, due to prolonged poverty, gave up hope in the elementary school. Nor do the responses reflect the condition of those who are culturally or otherwise disadvantaged for whom higher education was never a real possibility. Others may not have applied for a variety of personal reasons, conditions we need to know more about so that we can devise programs to assist all who have the ability to realize their full potential.

What Are Some of the Significant Barriers to College Attendance?

The problem of finance remains one of the most critical elements in determing availability of education for individual students. Tuition costs of private institutions continue to increase about $100 a year, and all institutions, public and private, have been forced to increase costs of room and board in relation to the general increase in the cost of living.

Because New York exports more undergraduate college students than are imported, about 37,000 more exports to be more precise, the question arises as to whether or not barriers will develop to out-of-state enrollment. In recent years it has been speculated that institutions in other states will become increasingly restrictive and enrollment projections should assume that the proportion, if not the absolute number of New York students registering in colleges and universities in other states, will decline. In January of 1966 inquiries were made and replies received from 24 private institutions and 17 public institutions in states to which New York students migrate in significant numbers. Of the exports, two-thirds enroll in private institutions, and the answers indicated that such colleges and universities are under no pressure or compulsion to discriminate on a basis of state residency in selecting students. In the public sector no significant changes of policy were reported in terms of the quota of out-of-state students to be admitted as a proportion of the total enrollment. It was clear, however, that out-of-state tuition was increasing and higher admissions standards are being applied. The conclusion is that out-of-state applicants, if sufficiently able financially and academically, may surmount such barriers as now exist. The data reveal that New Yorkers are successfully meeting such tuition costs and selective admission procedures. Therefore, it seems reasonable to conclude that the current pattern of migration is likely to continue. Whether more attractive opportunities within the State will lure more applicants to remain will be worth continuing study.

Is it Going to Be Possible to Staff the Colleges with Faculty to Meet the Demands of Growing Enrollments?

Studies undertaken by national organizations in the mid-fifties pointed to an impending crisis in the supply of faculty manpower. Recent studies have forced reassessment of this judgment, and special analysis was made for the Education Department during the summer of 1966. As emphasized in the Regents 1964 Statewide Plan, faculty manpower is a vital area requiring continuing attention in terms of recruitment, salary improvement and other conditions of appointment, but significant progress has been made, and on the whole it is unrealistic to classify the situation as a crisis or emergency.

During the past decade the percent of full-time college and university instructional staff in four-year institutions holding the doctorate has increased by about 10%. In New York State it grew from 52.7% in 1958-59 to 57.3% in 1962-63. If possession of the doctorate is a reasonable indication of quality of faculty, the question still remains of the adequacy of supply in numbers. Because of the dramatic increase in enrollments during the past five years, this has been a cause for special concern. It was assumed that the student-faculty ratio would be forced to increase; the reverse has been the case. The ratio of students to faculty actually went from 11.89 in 1962 down to 11.43 in 1965.

It must be recognized that these figures indicate the general situation. There are differences from institution to institution and between one academic field and another. The community colleges, as the fastest growing sector of higher education, will require special attention. And there are shortages in areas such as physics, mathematics, economics, sociology, degree nursing, and library science. If it is possible to maintain a reasonable balance between demand and supply during the next five years, the situation in the 1970's may improve even more. The increase of graduate enrollments now being observed will produce a larger number of holders of the doctorate available for appointment early in the next decade.

What Has Been Happening to Faculty Salaries?

An analysis of data published in a bulletin of the American Association of University Professors indicates that New York State institutions in the fall of 1965 were paying average salaries that were about 6% above the previous year. Data drawn from this source and arranged by type of institution are presented in the appendix, Tables 5 and 6.

Differences exist among the institutions that are worthy of note. An examination of salary data for individual institutions in the A.A.U.P. Bulletin reveals that smaller colleges in general are in a weaker competitive position.

What about Educational Facilities? Will There Be Enough Space? What Is the Nature and Magnitude of the Task? What Are the Anticipated Sources of Funds?

In asking individual institutions for projections of enrollments, responses were often made contingent upon the availability of facilities. Data on facility needs contained breakdowns on the kind of projected construction, its anticipated cost, and the possible sources of funds. The responses seen even as general estimates are impressive. Inasmuch as the facilities report does not take into account increased building costs, higher interest rates and the tight money market, the task appears to be one of massive proportions. If the projections are valid, they indicate a need for buildings between 1966 and 1970 that will cost in the order of $1,741,000,000. Of this total around $512 million will be for State University, about $455 million for City University, and about $755 million for the private institutions.

The projection of costs in relation to completion dates for this construction reflects a sizable increase each year toward 1970. Whether this means a growing need for estimates that are subject to modification must be determined. The tremendous sums involved here emphasize the necessity of obtaining more and better data to assure that facilities are planned as needed, are efficient, and are economical. It is anticipated that within the coming year, more detailed information on a statewide basis will be obtained to evaluate for planning purposes.

Data concerning the nature and costs of the facilities by type and by sponsoring unit, public or private, are given in Tables 7, 8, and 9 of the appendix.

SECTION III - AREAS THAT NEED SPECIAL ATTENTION

The Potential for College Study

At present 61% of the high school graduates continue their formal education in some post-secondary program, either offering a degree or in a non-degree status. This leaves unanswered, however, the problems and circumstances of the remaining 39% of the high school graduates who do not attend and that large number of individuals who drop out of high school before receiving the diploma. The matter of potential for post-secondary study was investigated in detail by the President's Commission on Higher Education in 1947, but it is important that there be an investigation into matters of motivation, ambition, and opportunity that inhibit or encourage attendance. These factors, when applied to enrollment projections, will result in detailed planning for programs and facilities tailored to individual and social needs.

Since appropriately directed action waits upon such findings, it is necessary that a study identify in detail the nature and characteristics of educational, personal, and social needs which contribute to an individual's ability to gain entrance to and succeed in higher education. The Regents strongly urge that such a study be undertaken immediately.

Increased Opportunity for the Disadvantaged

Mention has been made in previous parts of this report on the problems of the disadvantaged. Such comments are frequently made in relation to matters that are a legitimate concern to all students. But the disadvantaged share all the problems to a special degree. The solution to their need does not rest in finding a neat compartment to be labelled "Opportunity" and operated in isolation from every other facet of the educational program. The degree of their need, however, does call for special emphasis and resources. An examination of the wide ranging developments taking place in City University indicates a common thread in efforts to serve the disadvantaged. The selection process must seek out potential variously defined and use innovative procedures to motivate, to admit and to educate. Psychological services, and remedial work are important. Money must be made available, not only for tuition but for books, transportation, and other expenses.

The special arrangements and services characteristic of this program are costly for the sponsoring colleges as well. Various ways of providing financial assistance to institutions must be found. Whether the method be contracts, grants, incentive funds or reimbursement, the financial arrangements should reflect as much flexibility as is expected in the admissions process.

In order to provide adequate higher educational opportunity the Regents request the Education Department to develop a comprehensive plan with regard to post-secondary educational experiences for the disadvantaged. Although significant progress is being made, the programs have a piecemeal quality. The time has come when a master plan of educational service to the disadvantaged can and should be prepared. The study should establish (1) the nature of programs, (2) the numbers of students to be enrolled, (3) the financial and other assistance needed, (4) the facilities to be provided, and (5) the probable cost. The study should also identify the role to be played by the State University of New York, the City University of New York, and the private colleges in sharing the responsibility for getting this most significant job done. A progress report would be delivered to the Regents by March 1, 1967, and a final report would be submitted by July 1, 1967. It is further recommended that the Division of Higher Education of the State Education Department be given the responsibility for conducting this study.

Manpower

Curricular development in the past has been based to a considerable degree upon academic requirements determined by the best judgments of professional faculty members concerning the needs of individuals and society. In the modern world of complex technologies the successful operation of our economy depends upon a high order of knowledge, a suitable number of practitioners in each field, and the harmonious interplay of many skills. While respecting the freedom of choice of the individual student and the integrity of faculties in academic affairs, some form of coordination or subsidy must be developed to prevent imbalance of demand and supply. In proposing curricular developments and in establishing new schools and colleges, it is essential to recognize that manpower development is a complex activity requiring the attention of many segments of private society and government. Manpower development involves such matters as recruitment, salaries and employment benefits, formal education, and in-service training. During the past year the Governor's Special Committee on Manpower emphasized the interrelationships through the functioning of an interagency committee. A Health Resources Center for the health professions has been established in State University. The problems must be a continuing concern in which education, government, and private industry are all represented and participate. Manpower data must be a vital element in the rationale for curricular proposals, and planning staffs and procedures must be organized to strengthen this process.

The Regents urge the Education Department to give continuing attention to the future supply of trained manpower by assisting in all possible ways in the development of educational programs that cover the full range of post-secondary training, from advanced and specialized graduate study to the two-year and non-degree programs in the community colleges.

Graduate Enrollments

It has been noted earlier that enrollments are increasing sharply. College administrators and graduate deans believe that the trend will continue and possibly accelerate. The situation will bear careful watching for several reasons. Graduate education is important; it provides the most highly trained teachers, researchers, and professional personnel in most fields. Graduate education is demanding in terms of facilities such as library collections, laboratories, and specialized faculty. It is expensive. Studies done over a period of time in the State of Colorado indicate that doctoral study may cost seven times as much as instruction during the freshman and sophomore years. Graduate programs are not easily or quickly developed.

Steps are being taken to develop a detailed inventory of the nature, capacity and plans of universities at the doctoral level. Such a study would be undertaken with the assistance of an advisory committee representative of graduate schools and would seek to identify anticipated developments in Ph.D. education and areas of unmet need. Due to the great cost of establishing new programs, the public institutions with access to public monies should give special priority to new doctoral programs in areas of manpower shortage.

Because of growing need for the importance of graduate education, and because of its demands in terms of time for development, facilities, faculties, and costs, the Regents instruct the Education Department to study during the current year the status, needs, and plans for graduate study at the advanced or doctoral level.

The Problem of Finance

Of all the problems of higher education the one that is becoming most critical is the matter of finance.

For the student and his family the question of educational opportunity is basically the cost of education. Earlier predictions that tuition charges in private institutions would increase at a rate of about $100 per year have been borne out. In both public and private colleges, room and board costs have also been increasing regularly. What effect will this have on the recruitment of students? Will institutions that rely heavily on tuition income for their successful operation be able to project increases in tuition indefinitely? Will it be necessary to increase and expand various forms of scholarship aid? Will personal cost of education force consideration of new forms of State and Federal support for both public and private institutions?

In institutional terms budgets have been rising steadily. Faculty salaries, which constitute the largest single item in the educational budget, have increased since 1955 at a rate of about 6% per year. This average increase, however, has been accompanied by a greater range among institutions in terms of the highest and lowest salaries. A question arises about the quality of the academic program in institutions that are now forced to seek low-paid staff. What will be the consequences of such a practice in the long run?

Institutional growth and development in most cases are also related to facilities and these, in turn, to the ability of the institution to raise funds. Increasingly, monies for building have come from loans. The very sizable amount of construction taking place on college campuses financed with borrowed money, especially in the light of current sharp increases in interest rates, raises questions as to the ability of the colleges to absorb the debt service from their operating budgets without penalizing the academic or other vital programs of the institution.

Financial aid from government, both State and Federal, in the form of grants and loans is no longer debated in educational circles. There has developed a strong reliance on such funds. The public assistance to higher education from State and Federal sources varies widely in terms of programs, and the amounts of money have increased strikingly in recent years. Whether or not such assistance is yet adequately related to costs must be carefully considered. For example, under the Higher Education Facilities Act of 1963 the Federal government provided grants for academic buildings to New York institutions during the past year amounting to $38,422,418. This impressive figure, however, covered only part of the construction. The total cost for the buildings involved was $231,808,066.

The studies of facilities projections for the next five years, mentioned earlier in this report, indicate the desirability of obtaining more information on the financial implications of educational growth. Cooperative planning must be expressed as a continuous process aimed at orderly, efficient, and economical development of all segments of higher education in the State, both public and private, recognizing that their successful interaction in serving individual and society's needs is a public resource.

As reliance on public funds has grown, it has become more essential that careful long-range planning be done by the institutions and that they communicate their needs. As government and higher education increasingly interact, communication and mutual planning become increasingly important.

Among the various forms of financial assistance and support, it is likely that contracts with individual institutions and groups of institutions will be increasingly used. During the past year a program was developed under which private medical schools within the State may enter into contracts for which funds are provided to increase enrollment of medical students. The Regents question the desirability of the arrangement under which the State University serves as the agent to administer this program. The University system, having medical schools, is an interested party. It is, therefore, recommended that the administration of the program for private medical school contracts be made the responsibility of the Regents and that such other contractual programs as may later be developed also be administered by the Regents.

The problems of finance described in the preceding paragraph and other problems pertaining to higher education underscore the importance of Governor Rockefeller's proposal that there be established a select committee to study the needs of our private colleges and universities. The Board of Regents welcomes this proposal for joint action and expresses its eagerness to join in the appointment of the committee and will make available to the committee the full resources of the State Education Department.

APPENDIX

Tables 1 - 9

CONTAINING SUPPLEMENTAL
DATA

Table 1
Full-Time College and University Enrollment
New York State
Actual 1960-61 to 1965-66
Projected 1966-67 to 1970-71; 1975-76; 1980-81

ACTUAL

Academic Year	Population Aged 17-20	Undergraduate Enrollment		Graduate and Professional Enrollment	Non-Matric. & Non-Degree Enrollment	Total Full-Time Enrollment	
		Number	% of 17-20			Number	% of Pop. 17-20
1960-61	849,000	190,000	22.4	24,700	4,300	219,000	25.8
1961-62	887,000	206,000	23.2	24,700	4,600	235,000	26.5
1962-63	920,000	218,000	23.7	27,600	6,200	252,000	27.4
1963-64	951,000	236,000	24.8	28,400	6,400	270,000	28.4
1964-65	1,023,000	263,000	25.7	34,000	7,400	304,000	29.7
1965-66	1,094,000	292,000	26.6	38,600	8,500	340,000	31.0

PROJECTED

Academic Year	Population Aged 17-20	Undergraduate Enrollment		Graduate and Professional Enrollment3/	Non-Matric. & Non-Degree Enrollment (Residual)	Total Full-Time Enrollment			
						Low 1/		High 2/	
		Low 1/	High 2/			Number	% of Pop. 17-20	Number	% of Pop. 17-20
1966-67	1,158,000	318,000	320,000	42,400	9,600	370,000	32.0	372,000	32.1
1967-68	1,201,000	339,000	343,000	45,600	11,400	396,000	33.0	400,000	33.3
1968-69	1,183,000	344,000	351,000	46,500	10,500	402,000	34.0	408,000	34.5
1969-70	1,208,000	362,000	371,000	49,100	10,900	423,000	35.0	431,000	35.7
1970-71	1,235,000	380,000	391,000	52,000	13,000	445,000	36.0	456,000	36.9
1975-76	1,385,000	485,000	508,000	66,900	12,100	561,000	40.5	587,000	42.4
1980-81	1,444,000	566,000	602,000	78,900	11,100	650,000	45.0	692,000	47.9

1/ Average trend over five years
2/ Most recent three year trend
3/ Based on high total enrollment

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Table 2
Projected Distribution of Full-Time Enrollment
By Types of Institutions, New York State
1966-67 to 1970-71; 1975-76; 1980-81

	1966-67	1967-68	1968-69	1969-70	1970-71	1975-76	1980-81
4-Year Colleges	306,400-308,000	323,900-327,200	324,800-329,700	337,100-343,500	349,800-358,400	410,600-429,700	455,000-484,400
Private	190,900-192,000	198,800-200,800	195,800-198,700	199,700-203,400	203,800-208,800	229,500-240,100	240,500-256,000
Public	115,400-116,000	125,100-126,400	129,000-131,000	137,500-140,100	146,000-149,600	181,200-189,600	214,500-228,400
CUNY	50,300- 50,600	54,300- 54,800	55,900- 56,700	59,600- 60,800	63,600- 65,200	71,800- 75,100	84,500- 90,000
SUNY	65,100- 65,500	70,900- 71,600	73,200- 74,300	77,800- 79,300	82,300- 84,400	109,400-114,500	130,000-138,400
2-Year Colleges	63,600- 64,000	72,100- 72,800	77,200- 78,300	85,900- 87,500	95,200- 97,600	150,300-157,300	195,000-207,600
Private	6,300- 6,300	7,100- 7,200	7,200- 7,300	8,000- 8,200	8,900- 9,100	11,200- 11,700	13,000- 13,800
Public	57,300- 57,700	64,900- 65,600	69,900- 71,000	77,800- 79,300	86,300- 88,500	139,100-145,600	182,000-193,800
Ag. & Tech. Coll.	9,600- 9,700	9,900- 10,000	10,000- 10,200	10,600- 10,800	11,100- 11,400	14,600- 15,300	19,500- 20,800
Community Coll.	47,700- 48,000	55,000- 55,600	59,900- 60,800	67,300- 68,500	75,200- 77,000	124,500-130,300	162,500-173,000
New York City	15,200- 15,300	18,200- 18,400	20,500- 20,800	23,700- 24,100	27,100- 27,800	49,400- 51,700	65,000- 69,200
Other	32,500- 32,700	36,800- 37,200	39,400- 40,000	43,600- 44,400	48,100- 49,200	75,200- 78,700	97,500-103,800
Total CUNY	50,300- 50,600	54,300- 54,800	55,900- 56,700	59,600- 60,800	63,600- 65,200	71,800- 75,100	84,500- 90,000
Total SUNY*	122,500-123,100	135,800-137,200	143,100-145,200	155,700-158,600	168,700-172,800	248,500-260,000	312,000-332,200
Total Public	172,800-173,700	190,100-192,000	199,000-202,000	215,300-219,400	232,300-238,000	320,300-335,200	396,500-422,100
Total Private	197,200-198,300	205,900-208,000	203,000-206,000	207,700-211,600	212,700-218,000	240,700-251,800	253,500-269,900
State Total	370,000-372,000	396,000-400,000	402,000-408,000	423,000-431,000	445,000-456,000	561,000-587,000	650,000-692,000

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*Includes all Community Colleges

Table 3
Projected Percentage Distribution of Full-Time Enrollment By Types of Institutions, New York State 1966-67 to 1970-71; 1975-76; 1980-81

	1966-67	1967-68	1968-69	1969-70	1970-71	1975-76	1980-81
4-Year Colleges	82.8	81.8	80.8	79.7	78.6	73.2	70.0
Private	51.6	50.2	48.7	47.2	45.8	40.9	37.0
Public	31.2	31.6	32.1	32.5	32.8	32.3	33.0
CUNY **	13.6	13.7	13.9	14.1	14.3	12.8	13.0
SUNY	17.6	17.9	18.2	18.4	18.5	19.5	20.0
2-Year Colleges	17.2	18.2	19.2	20.3	21.4	26.8	30.0
Private	1.7	1.8	1.8	1.9	2.0	2.0	2.0
Public	15.5	16.4	17.4	18.4	19.4	24.8	28.0
Ag. &. Tech. Coll.	2.6	2.5	2.5	2.5	2.5	2.6	3.0
Community Coll.	12.9	13.9	14.9	15.9	16.9	22.2	25.0
New York City	4.1	4.6	5.1	5.6	6.1	8.8	10.0
Other	8.8	9.3	9.8	10.3	10.8	13.4	15.0
Total CUNY **	13.6	13.7	13.9	14.1	14.3	12.8	13.0
Total SUNY*	33.1	34.3	35.6	36.8	37.9	44.3	48.0
Total Public	46.7	48.0	49.5	50.9	52.2	57.1	61.0
Total Private	53.3	52.0	50.5	49.1	47.8	42.9	39.0
State Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Includes all Community Colleges ** Senior Units Only

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Table 4

Present & Projected College Enrollment in New York State

Full-Time Enrollments Planned by Individual Institutions

	Undergraduate			Graduate			1st Prof.			Total		
	1965	1970	%CHG	1965	1970	%CHG.	1965	1970	%CHG.	1965	1970	%CHG.
Private Four-Year	145,894	190,311	30.4	23,672	34,670	46.5	10,609	11,623	9.6	180,175	236,604	31.3
Private Two-Year	6,275	9,311	48.4							6,275	9,311	48.4
City University	42,710	60,000	40.5	1,439	2,150	49.4				44,149	62,150	40.8
State University												
I. Univ. Ctrs.	17,101	28,970	69.4	2,530	5,730	126.5						
II. Univ. Coll.	29,502	43,800	48.5	229	2,300	904.4						
III. Spec. Coll.	1,523	1,750	14.9	141	350	148,2						
IV. Medical Ctrs.	420	1,325	215.5	1,672	2,275	36.1						
V. Contract Coll.	3,661	4,150	13.4	1,335	1,800	34.8						
Total 4-Year	52,207	79,995	53.2	5,907	12,455	110.9				58,114	92,450	59.1
VI. Agr. & Tech.	8,945	13,300	48.7									
VII. Comm. Coll.	38,831	78,900	103.2									
Total 2-Year	47,776	92,200	93.0							47,776	92,200	93.0
SUNY-Grand Total	99,983	172,195	72.2	5,907	12,455	110.9				105,890	184,650	74.4
Total Four-Year	240,811	330,306	37.2	31,018	49,275	58.9	10,609	11,623	9.6	282,438	391,204	38.5
Total Two-Year	54,051	101,511	87.8							54,051	101,511	87.8
Grand Total	294,862	431,817	46.4	31,018	49,275	58.9	10,609	11,623	9.6	336,489	492,715	46.4

Office of Planning in Higher Education
State Education Department

Comparison of Average Faculty Salaries and Compensation
Academic Year 1964-65 and 1965-66
Table 5

COMPLEX UNIVERSITIES

City University a

		1964-65	1965-66	Change	% Change
Compensation:	Averages	$11,869	$12,401	$532	4.5
Range of Institution	High	12,359	12,737		
Averages	Low	11,356	11,403		
Salary:	Averages	11,694	12,123	429	3.7
Range of Institution	High	12,185	12,460		
Averages	Low	11,182	11,125		

State University b

		1964-65	1965-66	Change	% Change
Compensation:	Averages	$11,453	$12,466	$1,013	8.8
Range of Institution	High	11,862	12,807		
Averages	Low	10,939	11,839		
Salary:	Averages	10,230	10,719	489	4.8
Range of Institution	High	10,632	11,008		
Averages	Low	9,793	10,181		

Complex Private c

		1964-65	1965-66	Change	% Change
Compensation:	Averages	$12,559	$13,250	$691	5.5
Range of Institution	High	14,396	15,146		
Averages	Low	9,036	9,847		
Salary:	Averages	11,224	11,741	517	4.6
Range of Institution	High	12,836	13,357		
Averages	Low	8,808	9,061		

Comparison of Average Faculty Salaries and Compensation
Academic Year 1964-65 and 1965-66
Table 6

FOUR YEAR INSTITUTIONS

State University [d]

		1964-65	1965-66	Change	% Change
Compensation:	Averages	$10,289	$11,006	$717	7.0
Range of Institution	High	10,623	11,220		
Averages	Low	10,070	10,652		
Salary:	Averages	9,080	9,456	376	4.1
Range of Institution	High	9,505	9,643		
Averages	Low	9,001	9,149		

Private 4-Year [e]

		1964-65	1965-66	Change	% Change
Compensation:	Averages	$ 9,567	$10,121	$554	5.8
Range of Institution	High	14,443	14,977		
Averages	Low	7,184	7,691		
Salary:	Averages	8,623	9,059	436	5.1
Range of Institution	High	10,312	10,380		
Averages	Low	6,829	7,202		

COMPLEX UNIVERSITIES

a City University of New York
- Brooklyn College
- City College
- Hunter College
- Queens College

b State University of New York
- at Albany
- at Binghamton
- at Buffalo
- at Stony Brook

c Private Complex Universities
- Columbia University (Incl. Teachers Coll.)
- Cornell University
- Fordham University
- New York University
- Rensselaer Polytechnic Institute
- Syracuse University (Incl. Coll. Lib. Arts)
- University of Rochester
- Yeshiva University

Four Year Institutions

d State University of New York, Colleges at
- Brockport
- Buffalo
- Cortland
- Fredonia
- Geneseo
- New Paltz
- Oneonta
- Oswego
- Plattsburgh
- Potsdam

Private Four Year Institutions

e
- Adelphi University
- Alfred University
- Bard College
- Canisius College
- Clarkson College of Technology
- Colgate University
- College of New Rochelle
- College of St. Rose
- Cooper Union
- D'Youville College
- Hamilton College
- Hartwick College
- Hobart & William Smith
- Hofstra University
- Iona College
- Ithaca College
- Long Island University
- Manhattan College
- Manhattanville College of the Sacred Heart
- Notre Dame College of Staten Island
- Pace College
- Polytechnic Institute of Brooklyn
- Pratt Institute
- Rosary Hill College
- St. Bernardine of Siena College
- St. Francis College
- St. John Fisher College
- St. Lawrence University
- Skidmore College
- Union College & University
- Union Theological Seminary
- U. S. Merchant Marine Academy
- Vassar College
- Wagner College
- Wells College
- St. John's University
- Barnard College
- Utica College of Syracuse University

* Source of all data used is the: American Association of University Professors Bulletin, 51 (285-288) June 1965; 52 (179-181) June 1966.

Table 7

STATE OF NEW YORK

Estimated Capital Expenditures By Year, 1966-1970
Public and Private Institutions of Higher Education

Year In Which Facilities Are To Be Completed	Academic Buildings	Residential and Dining Facilities	Multi-Use Buildings	Supporting Facilities	Total
UNKNOWN					
Subtotal	$ 13,722,000	$ 4,900,000	-	$ 8,645,000	$ 27,267,000
1966					
Subtotal	$ 101,349,000	$ 78,094,000	$ 3,500,000	$ 1,049,000	$ 183,992,000
1967					
Subtotal	$ 193,739,000	$109,656,000	$ 2,000,000	$22,221,000	$ 327,616,000
1968					
Subtotal	$ 258,733,000	$ 73,338,000	$ 2,900,000	$20,565,000	$ 355,536,000
1969					
Subtotal	$ 230,444,000	$ 45,250,000	$16,000,000	$23,654,000	$ 315,348,000
1970					
Subtotal	$ 421,039,000	$ 69,336,000	$22,000,000	$19,540,000	$ 531,915,000
FIVE YEAR TOTAL					
Public Instit.	$ 734,191,000	$192,047,000	$22,000,000	$18,733,000	$ 966,971,000
Private Instit.	484,835,000	188,527,000	24,400,000	76,941,000	774,703,000
GRAND TOTAL	$1,219,026,000	$380,574,000	$46,400,000	$95,674,000	$1,741,674,000

Office of Planning in Higher Education
9/1966

Based on data available in connection with State and City University Master Plans and individual projections of private institutions.

STATE OF NEW YORK

Projections of Estimated Capital Expenditures, 1966-1970
Public and Private Institutions of Higher Education

Type of Institution	Academic Buildings	Residential and Dining Facilities	Multi-Use Buildings	Supporting Facilities	Total
STATE UNIV. OF NEW YORK					
Two-Year Institutions (Ag. & Tech. Comm. Coll)	$ 70,833,000	$ 23,020,000	-	$13,784,000	$ 107,637,000
Four-Year Institutions (Centers & Colleges)	235,090,000	169,027,000	-	-	404,117,000
SUBTOTAL	$ 305,923,000	$ 192,047,000		$13,784,000	$ 511,754,000
CITY UNIV. OF NEW YORK					
Two-Year Institutions	$ 130,980,000	-	-	-	$ 130,980,000
Four-Year Institutions	297,288,000	-	$22,000,000	$ 4,949,000	324,237,000
SUBTOTAL	$ 428,268,000		$22,000,000	$ 4,949,000	$ 455,217,000
COMBINED PUBLIC					
Two-Year Institutions	$ 201,813,000	$ 23,020,000	-	$13,784,000	$ 238,617,000
Four-Year Institutions	532,378,000	169,027,000	$22,000,000	4,949,000	728,354,000
SUBTOTAL	$ 734,191,000	$ 192,047,000	$22,000,000	$18,733,000	$ 966,971,000
COMBINED PRIVATE					
Two-Year Institutions	$ 15,740,000	$ 7,320,000	-	$ 830,000	$ 23,890,000
Four-Year Institutions	469,095,000	181,207,000	$24,400,000	76,111,000	750,813,000
SUBTOTAL	$ 484,835,000	$ 188,527,000	$24,400,000	$76,941,000	$ 774,703,000
PUBLIC AND PRIVATE					
Two-Year Institutions	$ 217,553,000	$ 30,340,000	-	$14,614,000	$ 262,507,000
Four-Year Institutions	1,001,473,000	350,234,000	$46,400,000	81,060,000	1,479,167,000
GRAND TOTAL	$1,219,026,000	$ 380,574,000	$46,400,000	$95,674,000	$1,741,674,000

Office of Planning in Higher Education
9/66

Based on data available in connection with State and City University Master Plans and individual projections of private institutions.

Table 9

STATE OF NEW YORK

Probable Sources of Capital Funds, 1966-1970
Public and Private Institutions of Higher Education

Sources of Funds	Academic Buildings	Residential and Dining Facilities	Multi-Use Buildings	Supporting Facilities	Total
1. Federal Grants	$ 106,625,000	$ 1,289,000	$ 2,549,000	$10,142,000	$ 120,605,000
2. Federal Loans	63,800,400	41,283,000	3,508,000	5,138,000	113,729,000
3. State Appropriations	484,678,000	-	12,932,000	8,538,000	506,148,000
4. N.Y.S. Dormitory Auth.	38,461,000	242,533,000	5,970,000	14,868,000	301,832,000
5. Local Appropriations	250,635,000	1,096,000	12,060,000	8,314,000	272,105,000
6. Gifts	199,899,000	33,232,000	2,803,000	28,159,000	264,093,000
7. Private Loans	59,774,000	40,263,000	-	11,172,000	111,209,000
8. Institutional Funds on Hand	8,416,000	18,960,000	6,578,000	9,343,000	43,297,000
9. Other Sources	6,738,000	1,918,000	-	-	8,656,000
TOTAL	$1,219,026,000	$380,574,000	$46,400,000	$95,674,000	$1,741,674,000

Office of Planning in Higher Education

Based on data available in connection with State and City University Master Plans and individual projections of private institutions.

10/10/66

PART II

1966 INTERIM REVISION
OF THE
STATE UNIVERSITY MASTER PLAN

Review and Action of the Board of Regents

Part II

State University Master Plan 1966 Interim Revision

Review and Action of the Board of Regents

The 1966 Interim Revision is so organized as to include recommendations pertaining to enrollment, programs, faculty, students, and the operation of the various colleges that constitute State University. Comments are also included on the planning process itself. The Board of Regents in the previous section congratulated the Trustees and officers of State University for the progress made during the past year. The Board is pleased to give its approval to the large majority of the recommendations in the 1966 Revision of the Master Plan. In connection with certain recommendations this approval is qualified.

Section I - The Planning Process (Recommendation 1)

The four parts of Recommendation 1 propose that the Education Law be amended (a) to define a Master Plan as a flexible instrument for which approval of the Regents and Governor would be given in principle; (b) to set the time span for planning at twenty years; (c) to report on academic or fiscal plans in alternating years; and (d) to provide more time for study at each level of review.

These recommendations should be studied and carefully considered by the Education Department in consultation with representatives of State University, City University and the private colleges. Following such study, if changes in Parts a, b, or c of the recommendation are desirable, they may be made without changing the present Education Law.

If there is to be a change in the timing of reports (as per Recommendation 1-d) it will require amendment of the Education Law as it pertains to planning. A committee consisting of representatives of the Division of the Budget, State University, City University, and the Education Department is preparing recommendations.

Section II - New Educational Goals (Recommendations 2 through 8)

> Recommendation 2. That the unwritten policy of open door admission to State University be confirmed as the obligation of State University to find a place in the right program, on one or more campuses, for every qualified applicant of post-high school age.

The Regents approve of this recommendation. It will be necessary for the Trustees of State University in subsequent reports to describe in greater detail the implications of this policy. If every person of post-high school age and every high school graduate is to find opportunity, a variety of educational experiences and programs must be provided. The qualifications for admission in each field must be determined, facilities constructed, and instructors appointed to accommodate those who realistically may be expected to enroll. The Regents will await subsequent proposals through which State University will implement this open-door admission policy.

> Recommendation 6. That the proposed new major curriculums and specific programs on campuses of the State University, as selected in Appendix A, (of the State University Revision) be endorsed in principle as guides for future growth.

> Recommendation 8. That endorsement of campus proposals "in principle" by the Trustees as qualified above, be defined to mean approval of a flexible design for future growth without commitment as to program detail, administration, organizational structure, or future operating budget, or future construction funds.

In approving these recommendations the Regents assume that the curriculum proposals to implement these educational developments will follow the same procedures of approval and registration that apply to all colleges and universities in the State.

The 1964 Regents Statewide Plan on higher education in Recommendation 61 asked the State Education Department to develop more formal procedures for the approval of new institutions and major educational developments. The Department has consulted in this matter with the Advisory Council on Higher Education. A set of guidelines and procedures is being refined and following formal action by the Regents will serve to facilitate orderly growth of all institutions.

In giving approval in principle to the curriculums and programs proposed by the State University in Appendix A, the Regents assume that continuing attention will be given to avoiding unnecessary duplication in specialized subject areas.

Section III - Meeting Enrollment Demands (Recommendation 9)

> Recommendation 9. That the enrollment goal for the State University of New York be 184,650 full-time students in 1970 and 261,760 in 1974.

The enrollment goal of State University for 1970 is approved. Enrollment projections undertaken in the Education Department and at State University for the period after 1970 reflect different base years and result in some variation in the numbers expected to enroll. For general planning purposes, however, the 1974 projection is accepted.

The new programs and policies set forth in the State University Interim Revision such as increased opportunity for the disadvantaged and an open-door admissions policy underscore the importance of refining and adjusting the projection for the mid-seventies. The annual review of enrollment undertaken by the Education Department in consultation with State and City Universities must incorporate in detail the consequences of the establishment of new or enlarged programs. The process of annual review should reduce differences in enrollment projections prepared by various planning offices and provide precise data for the efficient and economical development of programs, construction of facilities, and recruitment of staff.

Section VII - The Educational Services (Recommendations 23 through 34)

> **Recommendation 24.** That there be established a statewide library communications network, connecting all campus libraries in State University with capability for remote station access to a central computing facility, with visual image transmission and reproduction facilities at each station.
>
> **Recommendation 27.** That the State University microwave network be expanded in stages to create a statewide communications system that will include links between educational television stations in the State and resources outside the State, and between libraries and communications centers of campuses of State University and those of private institutions of higher education in the State, and that will be capable of transmitting audio, visual, and computer-generated information.

These recommendations reflect appropriate sensitivity to the implications of new technical developments as they apply to the library field. The Trustees are urged to develop a network of services within the University that will assure the most effective use of resources for library and related services. In developing such a communications service for the University, it will be exceedingly important to relate it to the statewide Reference and Research Library Resources Program which was initiated in 1961 and for which funds were provided to the Education Department by the last Legislature. It will be essential in planning a State University library network to do so in a manner that is in a technical and organizational sense compatible with the broader library resources program of the State. This will require regular and close communication between State University and the State Education Department, in view of the Department's responsibility for the Reference and Research Library Resources Program.

Section VIII - All University Programs (Recommendations 35 through 42)

In this section a series of recommendations are submitted dealing with a broad variety of topics ranging from communication among presidents, through adult and continuing education, to courses by television and correspondence.

In connection with the development of statewide policies in continuing education, it is understood that the reference is to statewide policies within State University. As such these developments are highly desirable.

The Regents are currently developing plans for a comprehensive program of continuing education. It is intended that encouragement be given to the growth of programs under the supervision of the public schools and of colleges and universities and that these programs relate effectively to one another.

> Recommendation 41. That the course offerings of State University Continuing Education include a full program of correspondence courses, courses available through educational television, and courses available on or off campus by computer-assisted programmed learning and other electronic media: and that students be encouraged to use such media in combination in new concepts of independent study.

> Recommendation 42. That degree as well as non-degree-credit courses be made available through State University Continuing Education in cooperation with the participating campuses, and that such campuses provide for the award of Associate and Baccalaureate degrees for the work accomplished through Continuing Education on or off campus, and in day or evening or summer courses.

In connection with the establishment of degree programs through extension courses, it should be noted that present rules and regulations of the Regents and Commissioner of Education developed with the advice of the institutions of higher education in the State, prohibit conferring degrees without some work in residence. Any changes in this policy will require a careful review reflecting the judgments of various colleges in order to establish procedures that will be desirable and practical for all.

Section IX - Two-Year Colleges (Recommendations 43 through 49)

In addition to the matters referred to in the recommendations pertaining to the two-year colleges, the Regents suggest that the Trustees of State University may at some time wish to initiate a study of the role of governing boards of community colleges. This needs to be done in order to establish organizational patterns under which the local boards of control may enjoy increased educational responsibility, free from the restraints of the Boards of Supervisors and other agencies. In some parts of the State the policies, salary schedules, and employment practices that are developed by county agencies, including the Boards of Supervisors, are not ideally suited to the special requirements of an educational institution.

> Recommendation 44. The State University proceed to establish the following new community colleges, which have received Master Plan approval, when the legal requirements concerning enrollment, finance and curriculum have been met to the satisfaction of the Trustees of State University: Herkimer County, the Elmira-Horseheads region, the Tompkins-Cortland region, Ontario County, Franklin-Essex Counties, Clinton County, Greene-Columbia Counties, and Schenectady-Saratoga Counties.

This recommendation should not include the reference to Schenectady-Saratoga Counties since earlier Master Plan actions did not make reference to any specific development in this region. Studies are underway involving both Schenectady and Saratoga Counties that suggest some provision for community college education may be desirable. State University is encouraged to continue these studies and submit such proposals as are approved by local sponsoring agencies and the State University Trustees.

Recommendation 48. That increased support be sought and given to the Agricultural and Technical Colleges for the new programs of sub-technical or vocational curricula of varying lengths for high school graduates, persons of post-high school age, and other adults who reside beyond reach of a community college.

This is a desirable development but one that should take place in relation to the vocational education programs operated by the secondary schools. The two programs are not exclusive and communication and cooperation in the local areas should result in enriched programs available through one or both educational sources.

Discussions and regional conferences involving officers of community colleges and secondary schools have been effective in planning for vocational education. Such conferences should continue and be expanded

Section X - The Senior Colleges (Recommendations 50 through 54)

Recommendation 51. That a new college be established in the Herkimer-Rome-Utica area with strong emphasis upon the sciences and technology, and that it be confined to upper divisional and graduate programs below the doctoral level.

The dramatic growth of community college enrollments and the corresponding increase of students in transfer curricula indicate that various types of educational programs must be established. Upper division colleges were suggested in 1956 and in the 1964 Regents Statewide Plan and are still supported.

The strong and growing need for manpower in the fields of science and engineering indicates that such emphasis in a new college could help meet an important need. This recommendation is approved in principle. Specific studies and proposals with regard to the establishment of this college are encouraged.

Section XI - The Specialized and Contract Colleges
(Recommendations 55 and 56)

Recommendation 55. That the specialized colleges, including contract colleges, not expand their programs of instruction and research into areas more properly assigned to the University Centers.

Recommendation 56. That the functions and programs of the contract colleges and the relationship of these colleges to the State University continue to be studied.

These two recommendations, carried over from the 1964 State University Master Plan, were considered and endorsed by the Regents at that time as "essentially broad objectives or goals." The Regents Statewide Plan (1964) noted that after the further study called for by Recommendation 56, "schedules and specific steps to implement the objectives" would be proposed by State University.

It is expected that any proposed changes will be fully discussed by the institutions involved and that the study will define more precisely the nature of instructional and research functions better conducted in one setting or another and provide guidance as to what would constitute proper assignment. Until this is accomplished the Regents postpone any comment or action with respect to Recommendation 55. In the meantime the Regents will seek clarification from State University concerning this recommendation.

PART III

1966 CITY UNIVERSITY

INTERIM REVISION OF THE MASTER PLAN

Review and Action of the Board of Regents

Part III

City University Master Plan 1966 Interim Revision

Review and Action of the Board of Regents

Introduction

The 1966 revision of City University reflects continuity in form in accord with the 1964 Master Plan and the first revision a year ago. Significant progress is reported in many areas identified in the earlier materials, and there is also information of new and exciting developments in several fields.

The 1965-66 academic year was a time of both crisis and achievement. The University examined its internal organization and its relationship to the government of City and State and the people whom it serves. New formulas for financing new programs to meet emerging educational needs have been developed, and there is reason to expect that the City University is entering upon a period of significant development. Members of the Board of Higher Education, Chancellor Bowker and his associates and the faculties are to be congratulated on their achievements.

With the comments that follow, the Regents give general approval to the 1966 Revision of the Master Plan of City University and commend it to the Governor and the Legislature.

Plans for New Curricula

The Graduate Program

The development of graduate programs proceeds at an accelerating pace. Master's and Doctoral programs have been established in many of the traditional areas, and further developments are being planned. Doctoral programs in anthropology and philosophy will be initiated in 1966-67, and programs in biochemistry, comparative literature, education, romance languages, and musicology are being developed. Still to be fully evaluated is work in such fields as the health sciences, including nursing and optometry, also public welfare, library science, city planning, and law. Reference to the rationale for graduate development is brief, and it will be helpful to provide additional information in further reports. As manpower information is refined, it will be desirable to build programs of advanced and special study in relation to society's needs. At the same time it is expected that the faculty will continue to exercise its responsibility for the interplay of study among the various disciplines and promote those fields that also have special values in the academic community as a whole, and for the individual student and scholar. Because of its location, resources, and the growth of its programs, it is reasonable to expect that City University should share a heavy burden of growth in graduate enrollments.

The Community Colleges

The community colleges represent another area of rapid educational growth. An impressive number of new programs are being developed. These include several fields, such as engineering and para-medical sciences where additional instruction and improved manpower supply are of great importance.

Programs for the Disadvantaged

It is both appropriate and significant that a description of various programs for the educationally disadvantaged is placed in the section headed New Curricula. The officers of City University have clearly recognized that new educational opportunities must be provided and greater assistance made available to present and prospective students if new answers are to be found for the old problems - the problems the poor and disadvantaged have in seeking higher education. Reference has been made elsewhere in the report to the quite considerable achievement effected through the College Discovery Programs conducted in the City University's community colleges and in cooperation with the public school system.

Though not included in the report, City University has moved forward with additional financial resources during the past summer to establish still other programs to serve the disadvantaged. Though the numbers enrolled in these programs are still modest in relation to the Metropolitan population to be served, techniques are now being developed that give promise to wider application.

Plans for New Facilities

The discussion of developing programs has a special significance in terms of facilities at City University since the bricks and mortar or the lack of enough of them have placed a limitation on the growth of the institution. The establishment of the City University Construction Fund gives reason to expect that the buildings necessary to accommodate the projected programs and enrollments will be provided. It is expected that future reports will include even more detailed information on the facilities program.

The building program described on pages 39 through 45 of the Interim Revision is hereby approved. It is understood that the costs of the buildings are estimates and shall not be considered to limit expenditures.

Enrollment Goals

In this report the City University for the first time formally accepts as its objective the development of programs sufficient to offer to all high school graduates of New York City an opportunity for post-high school education and to plan space for the numbers expected to enroll. According to the student's rank in high school, he will have the opportunity to attend a senior college, a community college, or a special program of some kind. From past experience the authorities have estimated the number of individuals who are likely to accept these offers of admission as opposed to those who will elect to attend other public or private institutions in other parts of the State or other parts of the Nation. Since the enrollment goals are ambitious, it will be important in future reports to provide greater detail on the implications this open-door policy will have for facilities, staff and budget. It is intended that the program will result in the full and coordinated use of University resources at three levels: the senior colleges, community colleges, and the sub-professional units.

While establishing the policy of educational opportunity for all high school graduates, City University has also set a higher enrollment objective for its full-time baccalaureate programs. This new goal contemplates offers of admission to about one-quarter of all high school graduates with the expectation that about two-thirds of those invited will accept the offer and matriculate. The shortage of facilities referred to earlier, however, has limited enrollments in the four-year college programs and created a situation in 1965 where accommodated enrollees numbered 5,000 short of this objective. This deficit emphasizes the importance of completing the planned new facilities promptly.

Library Development

The annual revision of the Master Plan submitted by City University is in its nature a brief document, and time and space did not permit description of all areas of development. The library is one of those where a brief mention was provided. This is an area, however, of central importance for all programs especially those at the upper division and graduate levels. The current collection of City University of 1,750,000 volumes serves all twelve units including the community colleges. In contemplating the education growth proposed, special attention will have to be given to certain matters related to library operation and expansion. These will include:

1) The addition of library personnel adequate to administer the book collections and serve the growing enrollments.

2) An increase in library physical plant paralleling other forms of growth.

3) Special attention to the book collection for the graduate programs.

4) Measures to participate in and take advantage of the statewide library reference and research resources program.

END